Andrew J Burton

List of Publications by Year
in descending order

69 papers	6,352 citations	117625 34 h-index	114465 63 g-index
70 all docs	70 docs citations	70 times ranked	5915 citing authors

#	Article	IF	Citations
1	FINE ROOT ARCHITECTURE OF NINE NORTH AMERICAN TREES. Ecological Monographs, 2002, 72, 293-309.	5.4	767
2	Soil warming, carbonâ€“nitrogen interactions, and forest carbon budgets. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9508-9512.	7.1	459
3	Responses of tree fine roots to temperature. New Phytologist, 2000, 147, 105-115.	7.3	407
4	Simulated chronic nitrogen deposition increases carbon storage in Northern Temperate forests. Global Change Biology, 2008, 14, 142-153.	9.5	381
5	Variation in sugar maple root respiration with root diameter and soil depth. Tree Physiology, 1998, 18, 665-670.	3.1	379
6	Atmospheric Nitrate Deposition, Microbial Community Composition, and Enzyme Activity in Northern Hardwood Forests. Soil Science Society of America Journal, 2004, 68, 132-138.	2.2	312
7	Temperature response of soil respiration largely unaltered with experimental warming. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13797-13802.	7.1	308
8	COUPLING FINE ROOT DYNAMICS WITH ECOSYSTEM CARBON CYCLING IN BLACK SPRUCE FORESTS OF INTERIOR ALASKA. Ecological Monographs, 2003, 73, 643-662.	5.4	233
9	Spatial Variation in Nitrogen Availability in Three Successional Plant Communities. Journal of Ecology, 1995, 83, 357.	4.0	222
10	Simulated chronic NO3 â^' deposition reduces soil respiration in northern hardwood forests. Global Change Biology, 2004, 10, 1080-1091.	9.5	194
11	Chronic nitrate additions dramatically increase the export of carbon and nitrogen from northern hardwood ecosystems. Biogeochemistry, 2004, 68, 179-197.	3.5	187
12	SIMULATED ATMOSPHERIC NO₃^{â^'} DEPOSITION INCREASES SOIL ORGANIC MATTER BY SLOWING DECOMPOSITION. Ecological Applications, 2008, 18, 2016-2027.	3.8	174
13	Atmospheric nitrate deposition and the microbial degradation of cellobiose and vanillin in a northern hardwood forest. Soil Biology and Biochemistry, 2004, 36, 965-971.	8.8	151
14	DROUGHT REDUCES ROOT RESPIRATION IN SUGAR MAPLE FORESTS. , 1998, 8, 771-778.		138
15	MICROBIAL IMMOBILIZATION AND THE RETENTION OF ANTHROPOGENIC NITRATE IN A NORTHERN HARDWOOD FOREST. Ecology, 2000, 81, 1858-1866.	3.2	137
16	Soil respiration, root biomass, and root turnover following longâ€term exposure of northern forests to elevated atmospheric CO₂ and tropospheric O₃. New Phytologist, 2008, 180, 153-161.	7.3	134
17	Chronic <scp><scp>N</scp></scp> deposition alters root respirationâ€tissue <scp><scp>N</scp></scp> relationship in northern hardwood forests. Global Change Biology, 2012, 18, 258-266.	9.5	101
18	Microbial responses to a changing environment: implications for the future functioning of terrestrial ecosystems. Fungal Ecology, 2011, 4, 386-395.	1.6	99

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19	Soil Respiration along Environmental Gradients in Olympic National Park. Ecosystems, 2003, 6, 326-335.	3.4	96
20	Forest productivity under elevated CO2 and O3: positive feedbacks to soil N cycling sustain decade-long net primary productivity enhancement by CO2. Ecology Letters, 2011, 14, 1220-1226.	6.4	96
21	Effect of measurement CO2 concentration on sugar maple root respiration. Tree Physiology, 1997, 17, 421-427.	3.1	83
22	Field measurements of root respiration indicate little to no seasonal temperature acclimation for sugar maple and red pine. Tree Physiology, 2003, 23, 273-280.	3.1	77
23	Elevated carbon dioxide and ozone alter productivity and ecosystem carbon content in northern temperate forests. Global Change Biology, 2014, 20, 2492-2504.	9.5	60
24	Anthropogenic N Deposition Increases Soil C Storage by Decreasing the Extent of Litter Decay: Analysis of Field Observations with an Ecosystem Model. Ecosystems, 2012, 15, 450-461.	3.4	59
25	Effects of repeated whole-tree harvesting on soil properties and tree growth in a Norway spruce (Picea abies (L.) Karst.) stand. Forest Ecology and Management, 2014, 313, 180-187.	3.2	56
26	Latitudinal variation in sugar maple fine root respiration. Canadian Journal of Forest Research, 1996, 26, 1761-1768.	1.7	55
27	Acclimation and soil moisture constrain sugar maple root respiration in experimentally warmed soil. Tree Physiology, 2013, 33, 949-959.	3.1	54
28	Measurement carbon dioxide concentration does not affect root respiration of nine tree species in the field. Tree Physiology, 2002, 22, 67-72.	3.1	53
29	ATMOSPHERIC NITRATE DEPOSITION AND ENHANCED DISSOLVED ORGANIC CARBON LEACHING. Soil Science Society of America Journal, 2005, 69, 1233-1237.	2.2	52
30	Anthropogenic N deposition and the fate of 15NO3- in a northern hardwood ecosystem. Biogeochemistry, 2004, 69, 143-157.	3.5	49
31	Variation in Forest Soil Properties along a Great Lakes Air Pollution Gradient. Soil Science Society of America Journal, 1991, 55, 1709-1715.	2.2	47
32	Fine Root Architecture of Nine North American Trees. Ecological Monographs, 2002, 72, 293.	5.4	45
33	Adjustment of Forest Ecosystem Root Respiration as Temperature Warms. Journal of Integrative Plant Biology, 2008, 50, 1467-1483.	8.5	44
34	Global transcriptomic profiling of aspen trees under elevated [CO2] to identify potential molecular mechanisms responsible for enhanced radial growth. Journal of Plant Research, 2013, 126, 305-320.	2.4	41
35	Use of multivariate methods in forest research site selection. Canadian Journal of Forest Research, 1991, 21, 1573-1580.	1.7	40
36	Chronic nitrogen deposition reduces the abundance of dominant forest understory and groundcover species. Forest Ecology and Management, 2013, 293, 39-48.	3.2	38

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37	Microbial Cycling of C and N in Northern Hardwood Forests Receiving Chronic Atmospheric NO3â˜ Deposition. Ecosystems, 2006, 9, 242-253.	3.4	35
38	Variation in wood density and carbon content of tropical plantation tree species from Ghana. New Forests, 2014, 45, 35-52.	1.7	35
39	Foliar Nutrients in Sugar Maple Forests along a Regional Pollution-Climate Gradient. Soil Science Society of America Journal, 1993, 57, 1619-1628.	2.2	33
40	Substituting root numbers for length: improving the use of minirhizotrons to study fine root dynamics. Applied Soil Ecology, 2003, 23, 127-135.	4.3	33
41	Anthropogenic nitrogen deposition ameliorates the decline in tree growth caused by a drier climate. Ecology, 2018, 99, 411-420.	3.2	33
42	Characteristics of DOC Exported from Northern Hardwood Forests Receiving Chronic Experimental NO 3 â˜ Deposition. Ecosystems, 2007, 10, 369-379.	3.4	25
43	Carbon fluxes, storage and harvest removals through 60years of stand development in red pine plantations and mixed hardwood stands in Northern Michigan, USA. Forest Ecology and Management, 2015, 337, 88-97.	3.2	25
44	Simulated N deposition negatively impacts sugar maple regeneration in a northern hardwood ecosystem. Journal of Applied Ecology, 2012, 49, 155-163.	4.0	23
45	Adenylate control contributes to thermal acclimation of sugar maple fineâ€root respiration in experimentally warmed soil. Plant, Cell and Environment, 2018, 41, 504-516.	5.7	22
46	Root respiration and biomass responses to experimental soil warming vary with root diameter and soil depth. Plant and Soil, 2020, 451, 435-446.	3.7	22
47	Foliar sulfur and nitrogen along an 800-km pollution gradient. Canadian Journal of Forest Research, 1992, 22, 1761-1769.	1.7	20
48	Chronic nitrogen deposition alters tree allometric relationships: implications for biomass production and carbon storage. Ecological Applications, 2016, 26, 913-925.	3.8	20
49	Relationships among atmospheric deposition, throughfall, and soil properties in oak forest ecosystems. Canadian Journal of Forest Research, 1993, 23, 2348-2357.	1.7	19
50	Air pollution and the changing biogeochemistry of northern forests. Frontiers in Ecology and the Environment, 2012, 10, 181-185.	4.0	19
51	Sugar maple seed production and nitrogen in litterfall. Canadian Journal of Forest Research, 1991, 21, 1148-1153.	1.7	18
52	Atmospheric <scp>CO₂</scp> and <scp>O₃</scp> alter competition for soil nitrogen in developing forests. Global Change Biology, 2012, 18, 1480-1488.	9.5	18
53	Does Ungulate Foraging Behavior in Forest Canopy Gaps Produce a Spatial Subsidy with Cascading Effects on Vegetation?. Forest Science, 2014, 60, 819-829.	1.0	16
54	Interactive effects of climate change and fungal communities on wood-derived carbon in forest soils. Soil Biology and Biochemistry, 2017, 115, 297-309.	8.8	15

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55	Nitrogen turnover in the leaf litter and fine roots of sugar maple. Ecology, 2010, 91, 3456-3462.	3.2	14
56	The Contribution of Root â€“ Rhizosphere Interactions to Biogeochemical Cycles in a Changing World. , 2007, , 155-178.		11
57	Respiration from roots and the mycorrhizosphere. , 2010, , 127-156.		11
58	Sulfate Adsorption in Forest Soils of the Great Lakes Region. Soil Science Society of America Journal, 1994, 58, 1546-1555.	2.2	10
59	Productivity and growth efficiency in sugar maple forests. Forest Ecology and Management, 1994, 70, 319-327.	3.2	10
60	Effects of Experimental Soil Warming and Water Addition on the Transpiration of Mature Sugar Maple. Ecosystems, 2018, 21, 98-111.	3.4	10
61	Nitrification in Sludge-Amended Michigan Forest Soils. Journal of Environmental Quality, 1990, 19, 609-616.	2.0	7
62	Coarse woody debris decomposition assessment tool: Model development and sensitivity analysis. PLoS ONE, 2021, 16, e0251893.	2.5	5
63	Measuring Forest Floor, Mineral Soil, and Root Carbon Stocks. , 2008, , 129-142.		4
64	Elevated tropospheric CO2 and O3 may not alter initial wood decomposition rate or wood-decaying fungal community composition of Northern Hardwoods. International Biodeterioration and Biodegradation, 2016, 111, 74-77.	3.9	4
65	Acute O3 damage on first year coppice sprouts of aspen and maple sprouts in an open-air experiment. Journal of Environmental Monitoring, 2011, 13, 2436.	2.1	2
66	Coarse Woody Debris Decomposition Assessment Tool: Model validation and application. PLoS ONE, 2021, 16, e0254408.	2.5	2
67	Soil Respiration along Environmental Gradients in Olympic National Park. Ecosystems, 2003, 6, 326-335.	3.4	1
68	Sugar maple (Acer saccharum) Seedling Bank Response to Storm Disturbance and Single Tree Selection Harvest in the Southern Keweenaw Peninsula, Michigan. American Midland Naturalist, 2021, 186, .	0.4	0
69	Carbon accumulation in soil layers under degraded, intact and planted forest cover types in tropical semi-deciduous and moist evergreen forests. New Forests, 0, , 1.	1.7	0