John L Campbell

List of Publications by Year in descending order

98 papers	7,252 citations	87843 38 h-index	58549 82 g-index
101 all docs	101 docs citations	101 times ranked	8956 citing authors

#	Article	IF	Citations
1	A meta-analysis of the response of soil respiration, net nitrogen mineralization, and aboveground plant growth to experimental ecosystem warming. Oecologia, 2001, 126, 543-562.	0.9	1,877
2	Global Charcoal Mobilization from Soils via Dissolution and Riverine Transport to the Oceans. Science, 2013, 340, 345-347.	6.0	432
3	Spatial and temporal variations in DOM composition in ecosystems: The importance of longâ€term monitoring of optical properties. Journal of Geophysical Research, 2008, 113, .	3.3	388
4	The Biogeochemistry of Carbon at Hubbard Brook. Biogeochemistry, 2005, 75, 109-176.	1.7	246
5	Winter in northeastern North America: a critical period for ecological processes. Frontiers in Ecology and the Environment, 2005, 3, 314-322.	1.9	234
6	Dissolved organic nitrogen budgets for upland, forested ecosystems in New England. Biogeochemistry, 2000, 49, 123-142.	1.7	200
7	Regional Assessment of N Saturation using Foliar and Root $$varvec {delta}^{f 15}{f N}$$. Biogeochemistry, 2006, 80, 143-171.	1.7	172
8	Ecosystem Processes and Human Influences Regulate Streamflow Response to Climate Change at Long-Term Ecological Research Sites. BioScience, 2012, 62, 390-404.	2.2	149
9	Consequences of climate change for biogeochemical cycling in forests of northeastern North AmericaThis article is one of a selection of papers from NE Forests 2100: A Synthesis of Climate Change Impacts on Forests of the Northeastern US and Eastern Canada.. Canadian Journal of Forest Research, 2009, 39, 264-284.	0.8	148
10	Changing forest water yields in response to climate warming: results from longâ€term experimental watershed sites across North America. Global Change Biology, 2014, 20, 3191-3208.	4.2	147
11	Input-Output Budgets of Inorganic Nitrogen for 24 Forest Watersheds in the Northeastern United States: A Review. Water, Air, and Soil Pollution, 2004, 151, 373-396.	1.1	131
12	Long-Term Integrated Studies Show Complex and Surprising Effects of Climate Change in the Northern Hardwood Forest. BioScience, 2012, 62, 1056-1066.	2.2	117
13	Conifer regeneration in stand-replacement portions of a large mixed-severity wildfire in the Klamathâ€“Siskiyou Mountains. Canadian Journal of Forest Research, 2009, 39, 823-838.	0.8	116
14	Influence of experimental snow removal on root and canopy physiology of sugar maple trees in a northern hardwood forest. Oecologia, 2013, 171, 261-269.	0.9	112
15	The Disappearing Cryosphere: Impacts and Ecosystem Responses to Rapid Cryosphere Loss. BioScience, 2012, 62, 405-415.	2.2	107
16	Increased nitrogen leaching following soil freezing is due to decreased root uptake in a northern hardwood forest. Global Change Biology, 2014, 20, 2663-2673.	4.2	106
17	Streamflow responses to past and projected future changes in climate at the Hubbard Brook Experimental Forest, New Hampshire, United States. Water Resources Research, 2011, 47, .	1.7	95
18	Runoff Curve Numbers for 10 Small Forested Watersheds in the Mountains of the Eastern United States. Journal of Hydrologic Engineering - ASCE, 2012, 17, 1188-1198.	0.8	94

#	Article	IF	Citations
19	Quantity is Nothing without Quality: Automated QA/QC for Streaming Environmental Sensor Data. BioScience, 2013, 63, 574-585.	2.2	91
20	Winter climate change affects growingâ€season soil microbial biomass and activity in northern hardwood forests. Global Change Biology, 2014, 20, 3568-3577.	4.2	87
21	Linking water age and solute dynamics in streamflow at the <scp>H</scp>ubbard <scp>B</scp>rook <scp>E</scp>xperimental <scp>F</scp>orest, <scp>NH</scp>, <scp>USA</scp>. Water Resources Research, 2015, 51, 9256-9272.	1.7	83
22	Past and projected future changes in snowpack and soil frost at the Hubbard Brook Experimental Forest, New Hampshire, USA. Hydrological Processes, 2010, 24, 2465-2480.	1.1	81
23	Nitrogen oligotrophication in northern hardwood forests. Biogeochemistry, 2018, 141, 523-539.	1.7	80
24	Climate change decreases nitrogen pools and mineralization rates in northern hardwood forests. Ecosphere, 2016, 7, e01251.	1.0	67
25	Ecohydrological implications of drought for forests in the United States. Forest Ecology and Management, 2016, 380, 335-345.	1.4	67
26	Differential sensitivity to climate change of C and N cycling processes across soil horizons in a northern hardwood forest. Soil Biology and Biochemistry, 2017, 107, 77-84.	4.2	63
27	Contrasting stream water NO3 â^' and Ca2+ in two nearly adjacent catchments: the role of soil Ca and forest vegetation. Global Change Biology, 2006, 12, 364-381.	4.2	61
28	Legacy Effects in Material Flux: Structural Catchment Changes Predate Long-Term Studies. BioScience, 2012, 62, 575-584.	2.2	59
29	Supply-side controls on soil respiration among Oregon forests. Global Change Biology, 2004, 10, 1857-1869.	4.2	55
30	Trends in stream nitrogen concentrations for forested reference catchments across the USA. Environmental Research Letters, 2013, 8, 014039.	2.2	54
31	Isotopic assessment of NO3â^'and SO42â^'mobility during winter in two adjacent watersheds in the Adirondack Mountains, New York. Journal of Geophysical Research, 2006, 111, .	3.3	52
32	Northern forest winters have lost cold, snowy conditions that are important for ecosystems and human communities. Ecological Applications, 2019, 29, e01974.	1.8	51
33	Estimating uncertainty in the volume and carbon storage of downed coarse woody debris. Ecological Applications, 2019, 29, e01844.	1.8	51
34	The downed and dead wood inventory of forests in the United States. Scientific Data, 2019, 6, 180303.	2.4	49
35	Contributing factors for drought in United States forest ecosystems under projected future climates and their uncertainty. Forest Ecology and Management, 2016, 380, 299-308.	1.4	43
36	Winter Weather Whiplash: Impacts of Meteorological Events Misaligned With Natural and Human Systems in Seasonally Snowâ€Covered Regions. Earth's Future, 2019, 7, 1434-1450.	2.4	43

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37	Decreased water flowing from a forest amended with calcium silicate. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5999-6003.	3.3	42
38	Impact of a reduced winter snowpack on litter arthropod abundance and diversity in a northern hardwood forest ecosystem. Biology and Fertility of Soils, 2012, 48, 413-424.	2.3	41
39	The effects of climate downscaling technique and observational data set on modeled ecological responses. Ecological Applications, 2016, 26, 1321-1337.	1.8	39
40	Recovery from chronic and snowmelt acidification: Longâ€term trends in stream and soil water chemistry at the Hubbard Brook Experimental Forest, New Hampshire, USA. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 2360-2374.	1.3	38
41	A Cross-Site Comparison of Factors Influencing Soil Nitrification Rates in Northeastern USA Forested Watersheds. Ecosystems, 2009, 12, 158-178.	1.6	37
42	Modeling potential hydrochemical responses to climate change and increasing CO₂at the Hubbard Brook Experimental Forest using a dynamic biogeochemical model (PnETâ€BGC). Water Resources Research, 2012, 48, .	1.7	37
43	Soil Freezing Effects on Sources of Nitrogen and Carbon Leached During Snowmelt. Soil Science Society of America Journal, 2014, 78, 297-308.	1.2	37
44	Unprocessed Atmospheric Nitrate in Waters of the Northern Forest Region in the U.S. and Canada. Environmental Science & Technology, 2019, 53, 3620-3633.	4.6	34
45	Nitrate and dissolved organic carbon mobilization in response to soil freezing variability. Biogeochemistry, 2016, 131, 35-47.	1.7	33
46	Mobility of Nitrogenâ€15â€Labeled Nitrate and Sulfurâ€34â€Labeled Sulfate during Snowmelt. Soil Science Society of America Journal, 2007, 71, 1934-1944.	1.2	31
47	Evaluation of forest disturbance legacy effects on dissolved organic matter characteristics in streams at the Hubbard Brook Experimental Forest, New Hampshire. Aquatic Sciences, 2014, 76, 611-622.	0.6	31
48	Arctic Vortex changes alter the sources and isotopic values of precipitation in northeastern US. Scientific Reports, 2016, 6, 22647.	1.6	30
49	Modeled ecohydrological responses to climate change at seven small watersheds in the northeastern United States. Global Change Biology, 2017, 23, 840-856.	4.2	30
50	A novel ice storm manipulation experiment in a northern hardwood forest. Canadian Journal of Forest Research, 2012, 42, 1810-1818.	0.8	29
51	Quantifying Uncertainty in Forest Nutrient Budgets. Journal of Forestry, 2012, 110, 448-456.	0.5	28
52	The effect of seasonal drying on sulphate dynamics in streams across southeastern Canada and the northeastern USA. Biogeochemistry, 2012, 111, 393-409.	1.7	28
53	Severe soil frost reduces losses of carbon and nitrogen from the forest floor during simulated snowmelt: A laboratory experiment. Soil Biology and Biochemistry, 2012, 44, 65-74.	4.2	28
54	Systematic variation in evapotranspiration trends and drivers across the Northeastern United States. Hydrological Processes, 2018, 32, 3547-3560.	1.1	28

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55	Sources of uncertainty in estimating stream solute export from headwater catchments at three sites. Hydrological Processes, 2015, 29, 1793-1805.	1.1	26
56	Forest wildfire, fuel reduction treatments, and landscape carbon stocks: A sensitivity analysis. Journal of Environmental Management, 2013, 121, 124-132.	3.8	24
57	Guidelines and considerations for designing field experiments simulating precipitation extremes in forest ecosystems. Methods in Ecology and Evolution, 2018, 9, 2310-2325.	2.2	24
58	Improving uncertainty in forest carbon accounting for REDD+ mitigation efforts. Environmental Research Letters, 2020, 15, 124002.	2.2	23
59	Watershed Nitrogen and Mercury Geochemical Fluxes Integrate Landscape Factors in Long-term Research Watersheds at Acadia National Park, Maine, USA. Environmental Monitoring and Assessment, 2007, 126, 9-25.	1.3	22
60	Predicting highâ€frequency variation in stream solute concentrations with water quality sensors and machine learning. Hydrological Processes, 2021, 35, .	1.1	22
61	Analysis of Nitrogen Dynamics in the Lye Brook Wilderness Area, Vermont, USA. Water, Air, and Soil Pollution, 2000, 122, 63-75.	1.1	20
62	Spatial patterns of soil nitrification and nitrate export from forested headwaters in the northeastern United States. Journal of Geophysical Research, 2012, 117, .	3.3	20
63	Projections of water, carbon, and nitrogen dynamics under future climate change in an old-growth Douglas-fir forest in the western Cascade Range using a biogeochemical model. Science of the Total Environment, 2019, 656, 608-624.	3.9	20
64	Stable water isotopes suggest subâ€canopy water recycling in a northern forested catchment. Hydrological Processes, 2015, 29, 5193-5202.	1.1	19
65	The promise and peril of intensiveâ€siteâ€based ecological research: insights from the Hubbard Brook ecosystem study. Ecology, 2015, 96, 885-901.	1.5	19
66	The application of an integrated biogeochemical model to simulate dynamics of vegetation, hydrology and nutrients in soil and streamwater following a whole-tree harvest of a northern hardwood forest. Science of the Total Environment, 2018, 645, 244-256.	3.9	18
67	Effects of an experimental ice storm on forest canopy structure. Canadian Journal of Forest Research, 2020, 50, 136-145.	0.8	18
68	Isotopic Evidence for Determining the Sources of Dissolved Organic Sulfur in a Forested Catchment. Environmental Science & Technology, 2014, 48, 11259-11267.	4.6	17
69	Regional meteorological drivers and long term trends of winter-spring nitrate dynamics across watersheds in northeastern North America. Biogeochemistry, 2016, 130, 247-265.	1.7	16
70	Give and Take: A Watershed Acid Rain Mitigation Experiment Increases Baseflow Nitrogen Retention but Increases Stormflow Nitrogen Export. Environmental Science & Technology, 2018, 52, 13155-13165.	4.6	16
71	Are Northeastern U.S. forests vulnerable to extreme drought?. Ecological Processes, 2017, 6, .	1.6	15
72	Current Practices in Reporting Uncertainty in Ecosystem Ecology. Ecosystems, 2018, 21, 971-981.	1.6	13

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73	Projections of water, carbon, and nitrogen dynamics under future climate change in an alpine tundra ecosystem in the southern Rocky Mountains using a biogeochemical model. Science of the Total Environment, 2019, 650, 1451-1464.	3.9	13
74	Carbon response to changing winter conditions in northern regions: current understanding and emerging research needs. Environmental Reviews, 2019, 27, 545-566.	2.1	12
75	Uncertainty in the net hydrologic flux of calcium in a pairedâ€watershed harvesting study. Ecosphere, 2016, 7, e01299.	1.0	11
76	The Long-Term Ecological Research community metadata standardisation project: a progress report. International Journal of Metadata, Semantics and Ontologies, 2009, 4, 141.	0.2	10
77	Watershed studies at the Hubbard Brook Experimental Forest: Building on a long legacy of research with new approaches and sources of data. Hydrological Processes, 2021, 35, .	1.1	10
78	Curve Numbers for Nine Mountainous Eastern United States Watersheds: Seasonal Variation and Forest Cutting. Journal of Hydrologic Engineering - ASCE, 2012, 17, 1199-1203.	0.8	9
79	Snowpack affects soil microclimate throughout the year. Climatic Change, 2020, 163, 705-722.	1.7	9
80	Measuring soil frost depth in forest ecosystems with ground penetrating radar. Agricultural and Forest Meteorology, 2014, 192-193, 121-131.	1.9	8
81	Simulation of the effects of forest harvesting under changing climate to inform long-term sustainable forest management using a biogeochemical model. Science of the Total Environment, 2021, 767, 144881.	3.9	8
82	Experimental approach and initial forest response to a simulated ice storm experiment in a northern hardwood forest. PLoS ONE, 2020, 15, e0239619.	1.1	8
83	Winter Climate Change Influences on Soil Faunal Distribution and Abundance: Implications for Decomposition in the Northern Forest. Northeastern Naturalist, 2017, 24, B209-B234.	0.1	8
84	Forest influences on snow accumulation and snowmelt at the Hubbard Brook Experimental Forest, New Hampshire, USA. Hydrological Processes, 2012, 26, 2524-2534.	1.1	6
85	Downsizing a long-term precipitation network: Using a quantitative approach to inform difficult decisions. PLoS ONE, 2018, 13, e0195966.	1.1	6
86	Quantifying uncertainty in annual runoff due to missing data. PeerJ, 2020, 8, e9531.	0.9	6
87	Patterns of Streamwater Acidity in Lye Brook Wilderness, Vermont, USA. Environmental Management, 2002, 30, 234-248.	1.2	5
88	A catchment water balance assessment of an abrupt shift in evapotranspiration at the Hubbard Brook Experimental Forest, New Hampshire, <scp>USA</scp>. Hydrological Processes, 2021, 35, e14300.	1.1	5
89	Origins of stream salinization in an upland New England watershed. Environmental Monitoring and Assessment, 2018, 190, 523.	1.3	4
90	Arctic loses carbon as winters wane. Nature Climate Change, 2019, 9, 806-807.	8.1	4

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91	Ecosystem Nitrogen Response to a Simulated Ice Storm in a Northern Hardwood Forest. Ecosystems, 2020, 23, 1186-1205.	1.6	4
92	Comparisons with Results from the Hubbard Brook Experimental Forest in the Northern Appalachians. , 2014, , 213-228.		4
93	Soil warming and winter snowpacks: Implications for northern forest ecosystem functioning. , 2019, , 245-278.		3
94	Simulating Impacts of Ice Storms on Forest Ecosystems. Journal of Visualized Experiments, 2020, , .	0.2	2
95	Estimating uncertainties in watershed studies. Eos, 2011, 92, 220-220.	0.1	1
96	Response of biomass, hydrology and biogeochemistry to alternative approaches of cutting a northern forest: model comparisons. Biogeochemistry, 2022, 157, 131-148.	1.7	1
97	A Comparison of Low-Cost Collector Configurations for Quantifying Ice Accretion. Journal of Applied Meteorology and Climatology, 2020, 59, 1429-1442.	0.6	1
98	Reply to Smith and Shortle: Lacking evidence of hydraulic efficiency changes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3740-E3740.	3.3	0