John D Aber

List of Publications by Year
in descending order

97 papers	24,870 citations	12330 69 h-index	34986 98 g-index
100 all docs	100 docs citations	100 times ranked	14970 citing authors

#	Article	IF	Citations
1	Forced aeration composting, aerated static pile, and similar methods. , 2022, , 197-269.		4
2	Carbon budget of the Harvard Forest Longâ€Term Ecological Research site: pattern, process, and response to global change. Ecological Monographs, 2020, 90, e01423.	5.4	67
3	Energy recovery from commercial-scale composting as a novel waste management strategy. Applied Energy, 2018, 211, 194-199.	10.1	37
4	Utilization of Low Grade Wood for Use as Animal Bedding: A Case Study of Eastern Hemlock. Journal of Forestry, 2018, 116, 520-528.	1.0	0
5	Heat Recovery from Composting: A Comprehensive Review of System Design, Recovery Rate, and Utilization. Compost Science and Utilization, 2017, 25, S11-S22.	1.2	31
6	Case Study: Economic viability of producing animal bedding from low quality and small diameter trees using a wood shaving machine. The Professional Animal Scientist, 2017, 33, 771-779.	0.7	1
7	Environmental variation is directly responsible for shortâ€but not longâ€term variation in forestâ€atmosphere carbon exchange. Global Change Biology, 2007, 13, 788-803.	9.5	219
8	Assessing nitrogen fluxes from roots to soil associated to rhizodeposition by apple (Malus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td	1.9	16
9	Long-term Decreases in Stream Nitrate: Successional Causes Unlikely; Possible Links to DOC?. Ecosystems, 2005, 8, 334-337.	3.4	89
10	Red spruce ecosystem level changes following 14 years of chronic N fertilization. Forest Ecology and Management, 2005, 219, 279-291.	3.2	75
11	Satellite-based modeling of gross primary production in an evergreen needleleaf forest. Remote Sensing of Environment, 2004, 89, 519-534.	11.0	682
12	Nor Gloom of Night: A New Conceptual Model for the Hubbard Brook Ecosystem Study. BioScience, 2004, 54, 139.	4.9	31
13	Effects of chronic nitrogen amendment on dissolved organic matter and inorganic nitrogen in soil solution. Forest Ecology and Management, 2004, 196, 29-41.	3.2	125
14	Short-term soil respiration and nitrogen immobilization response to nitrogen applications in control and nitrogen-enriched temperate forests. Forest Ecology and Management, 2004, 196, 57-70.	3.2	114
15	Decomposing litter as a sink for -enriched additions to an oak forest and a red pine plantation. Forest Ecology and Management, 2004, 196, 71-87.	3.2	52
16	Decadal-scale fates of tracers added to oak and pine stands under ambient and elevated N inputs at the Harvard Forest (USA). Forest Ecology and Management, 2004, 196, 89-107.	3.2	129
17	Redistributions of highlight turnover and replenishment of mineral soil organic N as a long-term control on forest C balance. Forest Ecology and Management, 2004, 196, 109-127.	3.2	46
18	Gross nitrogen process rates in temperate forest soils exhibiting symptoms of nitrogen saturation. Forest Ecology and Management, 2004, 196, 129-142.	3.2	79

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19	Ecosystem response to 15 years of chronic nitrogen additions at the Harvard Forest LTER, Massachusetts, USA. Forest Ecology and Management, 2004, 196, 7-28.	3.2	387
20	Nitrogen oxide gas emissions from temperate forest soils receiving long-term nitrogen inputs. Global Change Biology, 2003, 9, 346-357.	9.5	122
21	Using Mechanistic Models to Scale Ecological Processes across Space and Time. BioScience, 2003, 53, 68.	4.9	101
22	The Nitrogen Cascade. BioScience, 2003, 53, 341.	4.9	2,278
23	Is Nitrogen Deposition Altering the Nitrogen Status of Northeastern Forests?. BioScience, 2003, 53, 375.	4.9	544
24	The Importance of Land-Use Legacies to Ecology and Conservation. BioScience, 2003, 53, 77.	4.9	916
25	Nitrogen Pollution in the Northeastern United States: Sources, Effects, and Management Options. BioScience, 2003, 53, 357.	4.9	335
26	Interactive effects of nitrogen deposition, tropospheric ozone, elevated CO2 and land use history on the carbon dynamics of northern hardwood forests. Global Change Biology, 2002, 8, 545-562.	9.5	205
27	Evaluation of an integrated biogeochemical model (PnET-BGC) at a northern hardwood forest ecosystem. Water Resources Research, 2001, 37, 1057-1070.	4.2	99
28	US National Climate Change Assessment on Forest Ecosystems: An Introduction. BioScience, 2001, 51, 720.	4.9	19
29	Reaching Scientific Consensus and Informing Public Policy. BioScience, 2001, 51, 699.	4.9	1
30	Forest Processes and Global Environmental Change: Predicting the Effects of Individual and Multiple Stressors. BioScience, 2001, 51, 735.	4.9	194
31	Foliar free polyamine and inorganic ion content in relation to soil and soil solution chemistry in two fertilized forest stands at the Harvard Forest, Massachusetts. Plant and Soil, 2000, 222, 119-137.	3.7	67
32	Nitrogen Controls on Fine Root Substrate Quality in Temperate Forest Ecosystems. Ecosystems, 2000, 3, 57-69.	3.4	77
33	Long-Term Nitrogen Additions and Nitrogen Saturation in Two Temperate Forests. Ecosystems, 2000, 3, 238-253.	3.4	301
34	The Long-term Effects of Disturbance on Organic and Inorganic Nitrogen Export in the White Mountains, New Hampshire. Ecosystems, 2000, 3, 433-450.	3.4	185
35	Variation in soil net mineralization rates with dissolved organic carbon additions. Soil Biology and Biochemistry, 2000, 32, 597-601.	8.8	123
36	Dissolved organic carbon and nitrogen relationships in forest litter as affected by nitrogen deposition. Soil Biology and Biochemistry, 2000, 32, 603-613.	8.8	130

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37	Sources of Variability in Net Primary Production Predictions at a Regional Scale: A Comparison Using PnET-II and TEM 4.0 in Northeastern US Forests. Ecosystems, 1999, 2, 555-570.	3.4	30
38	Leaching of nutrient cations from the forest floor: effects of nitrogen saturation in two long-term manipulations. Canadian Journal of Forest Research, 1999, 29, 609-620.	1.7	48
39	Hemlock woolly adelgid impacts on community structure and N cycling rates in eastern hemlock forests. Canadian Journal of Forest Research, 1999, 29, 630-645.	1.7	181
40	Application of the forestâ€“soilâ€“water model (PnET-BGC/CHESS) to the Lysina catchment, Czech Republic. Ecological Modelling, 1999, 120, 9-30.	2.5	19
41	Estimating regional forest productivity and water yield using an ecosystem model linked to a GIS. Landscape Ecology, 1998, 13, 323-334.	4.2	82
42	Title is missing!. Plant and Soil, 1998, 203, 301-311.	3.7	224
43	A comparison of mapped estimates of long-term runoff in the northeast United States. Journal of Hydrology, 1998, 206, 176-190.	5.4	13
44	Nitrogen Saturation in Temperate Forest Ecosystems. BioScience, 1998, 48, 921-934.	4.9	1,630
45	MODELING LEACHING AS A DECOMPOSITION PROCESS IN HUMID MONTANE FORESTS. Ecology, 1997, 78, 1844-1860.	3.2	133
46	NITROGEN MINERALIZATION AND PRODUCTIVITY IN 50 HARDWOOD AND CONIFER STANDS ON DIVERSE SOILS. Ecology, 1997, 78, 335-347.	3.2	429
47	Forest Response to Disturbance and Anthropogenic Stress. BioScience, 1997, 47, 437-445.	4.9	165
48	Effects of land use, climate variation, and N deposition on N cycling and C storage in northern hardwood forests. Global Biogeochemical Cycles, 1997, 11, 639-648.	4.9	192
49	Modeling nitrogen saturation in forest ecosystems in response to land use and atmospheric deposition. Ecological Modelling, 1997, 101, 61-78.	2.5	262
50	Influence of excess nitrogen deposition on a white spruce (Picea glauca) stand in southern Alaska. Biogeochemistry, 1997, 38, 173-187.	3.5	20
51	A 15 N tracer technique for assessing fine root production and mortality. Oecologia, 1997, 112, 300-304.	2.0	20
52	Nitrogen saturation in a high elevation New England spruce-fir stand. Forest Ecology and Management, 1996, 84, 109-121.	3.2	161
53	Forest ecosystem response to four years of chronic nitrate and sulfate additions at Bear Brooks Watershed, Maine, USA. Forest Ecology and Management, 1996, 84, 29-37.	3.2	92
54	Determination of carbon fraction and nitrogen concentration in tree foliage by near infrared reflectances: a comparison of statistical methods. Canadian Journal of Forest Research, 1996, 26, 590-600.	1.7	171

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55	Vertical transport of dissolved organic C and N under long-term N amendments in pine and hardwood forests. Biogeochemistry, 1996, 35, 471-505.	3.5	325
56	Immobilization of a 15N-labeled nitrate addition by decomposing forest litter. Oecologia, 1996, 105, 141-150.	2.0	71
57	Extrapolating leaf CO2 exchange to the canopy: a generalized model of forest photosynthesis compared with measurements by eddy correlation. Oecologia, 1996, 106, 257-265.	2.0	266
58	The fate of 15N-labelled nitrate additions to a northern hardwood forest in eastern Maine, USA. Oecologia, 1995, 103, 292-301.	2.0	134
59	Forest biogeochemistry and primary production altered by nitrogen saturation. Water, Air, and Soil Pollution, 1995, 85, 1665-1670.	2.4	210
60	Spatial variability of digital soil maps and its impact on regional ecosystem modeling. Ecological Modelling, 1995, 82, 1-10.	2.5	38
61	Application of pnet-cn/chess to a spruce stand in Solling, Germany. Ecological Modelling, 1995, 83, 163-172.	2.5	22
62	Factors controlling atmospheric methane consumption by temperate forest soils. Global Biogeochemical Cycles, 1995, 9, 1-10.	4.9	341
63	Analyses of Forest Foliage III: Determining Nitrogen, Lignin and Cellulose in Fresh Leaves Using near Infrared Reflectance Data. Journal of Near Infrared Spectroscopy, 1994, 2, 25-32.	1.5	57
64	Analyses of Forest Foliage I: Laboratory Procedures for Proximate Carbon Fractionation and Nitrogen Determination. Journal of Near Infrared Spectroscopy, 1994, 2, 5-14.	1.5	22
65	Analyses of Forest Foliage II: Measurement of Carbon Fraction and Nitrogen Content by End-Member Analysis. Journal of Near Infrared Spectroscopy, 1994, 2, 15-23.	1.5	40
66	Fluxes of greenhouse gases between soils and the atmosphere in a temperate forest following a simulated hurricane blowdown. Biogeochemistry, 1993, 21, 61-71.	3.5	58
67	A national critical loads framework for atmospheric deposition effects assessment: IV. Model selection, applications, and critical loads mapping. Environmental Management, 1993, 17, 355-363.	2.7	14
68	Assessing the role of fine roots in carbon and nutrient cycling. Trends in Ecology and Evolution, 1993, 8, 174-178.	8.7	187
69	Experimental inducement of nitrogen saturation at the watershed scale. Environmental Science & Technology, 1993, 27, 565-568.	10.0	138
70	A strategy for the regional analysis of the effects of physical and chemical climate change on biogeochemical cycles in northeastern (U.S.) forests. Ecological Modelling, 1993, 67, 37-47.	2.5	34
71	Nitrogen cycling and nitrogen saturation in temperate forest ecosystems. Trends in Ecology and Evolution, 1992, 7, 220-224.	8.7	341
72	Exchange of N2O and CH4 between the atmosphere and soils in spruce-fir forests in the northeastern United States. Biogeochemistry, 1992, 18, 119-135.	3.5	110

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73	A generalized, lumped-parameter model of photosynthesis, evapotranspiration and net primary production in temperate and boreal forest ecosystems. Oecologia, 1992, 92, 463-474.	2.0	517
74	Determination of nitrogen, lignin, and cellulose content of decomposing leaf material by near infrared reflectance spectroscopy. Canadian Journal of Forest Research, 1991, 21, 1684-1688.	1.7	140
75	Comparison of wet chemistry and near infrared reflectance measurements of carbon-fraction chemistry and nitrogen concentration of forest foliage. Canadian Journal of Forest Research, 1991, 21, 1689-1693.	1.7	109
76	Carbon and nitrogen dynamics along the decay continuum: Plant litter to soil organic matter. Plant and Soil, 1989, 115, 189-198.	3.7	605
77	Nitrogen Saturation in Northern Forest Ecosystems. BioScience, 1989, 39, 378-386.	4.9	2,074
78	Remote sensing of forest canopy and leaf biochemical contents. Remote Sensing of Environment, 1988, 24, 85-108.	11.0	219
79	Prediction of leaf chemistry by the use of visible and near infrared reflectance spectroscopy. Remote Sensing of Environment, 1988, 26, 123-147.	11.0	235
80	Remote sensing of canopy chemistry and nitrogen cycling in temperate forest ecosystems. Nature, 1988, 335, 154-156.	27.8	306
81	Foliar analysis using near infrared reflectance spectroscopy. Canadian Journal of Forest Research, 1988, 18, 6-11.	1.7	145
82	Fine root turnover in forest ecosystems in relation to quantity and form of nitrogen availability: a comparison of two methods. Oecologia, 1985, 66, 317-321.	2.0	345
83	Primary production and nitrogen allocation of field grown sugar maples in relation to nitrogen availability. Biogeochemistry, 1985, 1, 135-154.	3.5	29
84	Fine Roots, Net Primary Production, and Soil Nitrogen Availability: A New Hypothesis. Ecology, 1985, 66, 1377-1390.	3.2	451
85	Restoration Ecology: An Environmental Middle Ground. BioScience, 1985, 35, 399-399.	4.9	18
86	Aboveground Production and N and P Cycling Along a Nitrogen Mineralization Gradient on Blackhawk Island, Wisconsin. Ecology, 1984, 65, 256-268.	3.2	683
87	Seasonal patterns of ammonium and nitrate uptake in nine temperate forest ecosystems. Plant and Soil, 1984, 80, 321-335.	3.7	174
88	Biomass prediction using generalized allometric regressions for some northeast tree species. Forest Ecology and Management, 1984, 7, 265-274.	3.2	141
89	The influence of substrate quality and stream size on wood decomposition dynamics. Oecologia, 1983, 58, 281-285.	2.0	98
90	Leaf-litter production and soil organic matter dynamics along a nitrogen-availability gradient in Southern Wisconsin (U.S.A.). Canadian Journal of Forest Research, 1983, 13, 12-21.	1.7	191

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91	The Role of Fine Roots in the Organic Matter and Nitrogen Budgets of Two Forested Ecosystems. Ecology, 1982, 63, 1481-1490.	3.2	480
92	Nitrogen and Lignin Control of Hardwood Leaf Litter Decomposition Dynamics. Ecology, 1982, 63, 621-626.	3.2	2,194
93	Nitrogen immobilization in decaying hardwood leaf litter as a function of initial nitrogen and lignin content. Canadian Journal of Botany, 1982, 60, 2263-2269.	1.1	355
94	Leaf Production During Secondary Succession in Northern Hardwoods. Ecology, 1980, 61, 200-204.	3.2	43
95	Predicting the effects of different harvesting regimes on productivity and yield in northern hardwoods. Canadian Journal of Forest Research, 1979, 9, 10-14.	1.7	71
96	Foliage-Height Profiles and Succession in Northern Hardwood Forests. Ecology, 1979, 60, 18-23.	3.2	159
97	Predicting the effects of different harvesting regimes on forest floor dynamics in northern hardwoods. Canadian Journal of Forest Research, 1978, 8, 306-315.	1.7	124