

John D Aber

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

98
papers

20,829
citations

66
h-index

100
g-index

100
ext. papers

22,162
ext. citations

5.2
avg, IF

6.28
L-index

#	Paper	IF	Citations
98	The Nitrogen Cascade. <i>BioScience</i> , 2003 , 53, 341	5.7	1856
97	Nitrogen Saturation in Northern Forest Ecosystems. <i>BioScience</i> , 1989 , 39, 378-386	5.7	1853
96	Nitrogen and Lignin Control of Hardwood Leaf Litter Decomposition Dynamics. <i>Ecology</i> , 1982 , 63, 621-626	6.6	1729
95	Nitrogen Saturation in Temperate Forest Ecosystems. <i>BioScience</i> , 1998 , 48, 921-934	5.7	1414
94	The Importance of Land-Use Legacies to Ecology and Conservation. <i>BioScience</i> , 2003 , 53, 77	5.7	760
93	Carbon and nitrogen dynamics along the decay continuum: Plant litter to soil organic matter. <i>Plant and Soil</i> , 1989 , 115, 189-198	4.2	546
92	Satellite-based modeling of gross primary production in an evergreen needleleaf forest. <i>Remote Sensing of Environment</i> , 2004 , 89, 519-534	13.2	525
91	Aboveground Production and N and P Cycling Along a Nitrogen Mineralization Gradient on Blackhawk Island, Wisconsin. <i>Ecology</i> , 1984 , 65, 256-268	4.6	500
90	Is Nitrogen Deposition Altering the Nitrogen Status of Northeastern Forests?. <i>BioScience</i> , 2003 , 53, 375	5.7	491
89	A generalized, lumped-parameter model of photosynthesis, evapotranspiration and net primary production in temperate and boreal forest ecosystems. <i>Oecologia</i> , 1992 , 92, 463-474	2.9	440
88	Predicting long-term patterns of mass loss, nitrogen dynamics, and soil organic matter formation from initial fine litter chemistry in temperate forest ecosystems. <i>Canadian Journal of Botany</i> , 1990 , 68, 2201-2208		396
87	NITROGEN MINERALIZATION AND PRODUCTIVITY IN 50 HARDWOOD AND CONIFER STANDS ON DIVERSE SOILS. <i>Ecology</i> , 1997 , 78, 335-347	4.6	352
86	The Role of Fine Roots in the Organic Matter and Nitrogen Budgets of Two Forested Ecosystems. <i>Ecology</i> , 1982 , 63, 1481-1490	4.6	352
85	Fine Roots, Net Primary Production, and Soil Nitrogen Availability: A New Hypothesis. <i>Ecology</i> , 1985 , 66, 1377-1390	4.6	348
84	Ecosystem response to 15 years of chronic nitrogen additions at the Harvard Forest LTER, Massachusetts, USA. <i>Forest Ecology and Management</i> , 2004 , 196, 7-28	3.9	344
83	Fine root turnover in forest ecosystems in relation to quantity and form of nitrogen availability: a comparison of two methods. <i>Oecologia</i> , 1985 , 66, 317-321	2.9	313
82	Nitrogen immobilization in decaying hardwood leaf litter as a function of initial nitrogen and lignin content. <i>Canadian Journal of Botany</i> , 1982 , 60, 2263-2269		307

81	Nitrogen Pollution in the Northeastern United States: Sources, Effects, and Management Options. <i>BioScience</i> , 2003 , 53, 357	5.7	300
80	Vertical transport of dissolved organic C and N under long-term N amendments in pine and hardwood forests. <i>Biogeochemistry</i> , 1996 , 35, 471-505	3.8	291
79	Factors controlling atmospheric methane consumption by temperate forest soils. <i>Global Biogeochemical Cycles</i> , 1995 , 9, 1-10	5.9	287
78	Nitrogen cycling and nitrogen saturation in temperate forest ecosystems. <i>Trends in Ecology and Evolution</i> , 1992 , 7, 220-4	10.9	280
77	Remote sensing of canopy chemistry and nitrogen cycling in temperate forest ecosystems. <i>Nature</i> , 1988 , 335, 154-156	50.4	261
76	Long-Term Nitrogen Additions and Nitrogen Saturation in Two Temperate Forests. <i>Ecosystems</i> , 2000 , 3, 238-253	3.9	249
75	Extrapolating leaf CO ₂ exchange to the canopy: a generalized model of forest photosynthesis compared with measurements by eddy correlation. <i>Oecologia</i> , 1996 , 106, 257-265	2.9	237
74	Litter decomposition: measuring relative contributions of organic matter and nitrogen to forest soils. <i>Canadian Journal of Botany</i> , 1980 , 58, 416-421		225
73	Modeling nitrogen saturation in forest ecosystems in response to land use and atmospheric deposition. <i>Ecological Modelling</i> , 1997 , 101, 61-78	3	223
72	Environmental variation is directly responsible for short- but not long-term variation in forest-atmosphere carbon exchange. <i>Global Change Biology</i> , 2007 , 13, 788-803	11.4	198
71	Long-term effects of experimental nitrogen additions on foliar litter decay and humus formation in forest ecosystems. <i>Plant and Soil</i> , 1998 , 203, 301-311	4.2	193
70	Prediction of leaf chemistry by the use of visible and near infrared reflectance spectroscopy. <i>Remote Sensing of Environment</i> , 1988 , 26, 123-147	13.2	185
69	Interactive effects of nitrogen deposition, tropospheric ozone, elevated CO ₂ and land use history on the carbon dynamics of northern hardwood forests. <i>Global Change Biology</i> , 2002 , 8, 545-562	11.4	181
68	Remote sensing of forest canopy and leaf biochemical contents. <i>Remote Sensing of Environment</i> , 1988 , 24, 85-108	13.2	181
67	Forest biogeochemistry and primary production altered by nitrogen saturation. <i>Water, Air, and Soil Pollution</i> , 1995 , 85, 1665-1670	2.6	177
66	The Long-term Effects of Disturbance on Organic and Inorganic Nitrogen Export in the White Mountains, New Hampshire. <i>Ecosystems</i> , 2000 , 3, 433-450	3.9	162
65	Assessing the role of fine roots in carbon and nutrient cycling. <i>Trends in Ecology and Evolution</i> , 1993 , 8, 174-8	10.9	162
64	Effects of land use, climate variation, and N deposition on N cycling and C storage in northern hardwood forests. <i>Global Biogeochemical Cycles</i> , 1997 , 11, 639-648	5.9	159

63	Seasonal patterns of ammonium and nitrate uptake in nine temperate forest ecosystems. <i>Plant and Soil</i> , 1984 , 80, 321-335	4.2	158
62	Leaf-litter production and soil organic matter dynamics along a nitrogen-availability gradient in Southern Wisconsin (U.S.A.). <i>Canadian Journal of Forest Research</i> , 1983 , 13, 12-21	1.9	157
61	Forest Processes and Global Environmental Change: Predicting the Effects of Individual and Multiple Stressors. <i>BioScience</i> , 2001 , 51, 735	5.7	155
60	Hemlock woolly adelgid impacts on community structure and N cycling rates in eastern hemlock forests. <i>Canadian Journal of Forest Research</i> , 1999 , 29, 630-645	1.9	155
59	Determination of carbon fraction and nitrogen concentration in tree foliage by near infrared reflectances: a comparison of statistical methods. <i>Canadian Journal of Forest Research</i> , 1996 , 26, 590-600	1.9	149
58	Forest Response to Disturbance and Anthropogenic Stress. <i>BioScience</i> , 1997 , 47, 437-445	5.7	146
57	Nitrogen saturation in a high elevation New England spruce-fir stand. <i>Forest Ecology and Management</i> , 1996 , 84, 109-121	3.9	138
56	Foliar analysis using near infrared reflectance spectroscopy. <i>Canadian Journal of Forest Research</i> , 1988 , 18, 6-11	1.9	125
55	Determination of nitrogen, lignin, and cellulose content of decomposing leaf material by near infrared reflectance spectroscopy. <i>Canadian Journal of Forest Research</i> , 1991 , 21, 1684-1688	1.9	121
54	Dissolved organic carbon and nitrogen relationships in forest litter as affected by nitrogen deposition. <i>Soil Biology and Biochemistry</i> , 2000 , 32, 603-613	7.5	120
53	Experimental inducement of nitrogen saturation at the watershed scale. <i>Environmental Science & Technology</i> , 1993 , 27, 565-568	10.3	120
52	Decadal-scale fates of tracers added to oak and pine stands under ambient and elevated N inputs at the Harvard Forest (USA). <i>Forest Ecology and Management</i> , 2004 , 196, 89-107	3.9	115
51	Effects of chronic nitrogen amendment on dissolved organic matter and inorganic nitrogen in soil solution. <i>Forest Ecology and Management</i> , 2004 , 196, 29-41	3.9	113
50	The fate of N-labelled nitrate additions to a northern hardwood forest in eastern Maine, USA. <i>Oecologia</i> , 1995 , 103, 292-301	2.9	113
49	Biomass prediction using generalized allometric regressions for some northeast tree species. <i>Forest Ecology and Management</i> , 1984 , 7, 265-274	3.9	113
48	MODELING LEACHING AS A DECOMPOSITION PROCESS IN HUMID MONTANE FORESTS. <i>Ecology</i> , 1997 , 78, 1844-1860	4.6	112
47	Nitrogen oxide gas emissions from temperate forest soils receiving long-term nitrogen inputs. <i>Global Change Biology</i> , 2003 , 9, 346-357	11.4	109
46	Foliage-Height Profiles and Succession in Northern Hardwood Forests. <i>Ecology</i> , 1979 , 60, 18-23	4.6	104

45	Predicting the effects of different harvesting regimes on forest floor dynamics in northern hardwoods. <i>Canadian Journal of Forest Research</i> , 1978 , 8, 306-315	1.9	101
44	Short-term soil respiration and nitrogen immobilization response to nitrogen applications in control and nitrogen-enriched temperate forests. <i>Forest Ecology and Management</i> , 2004 , 196, 57-70	3.9	100
43	Variation in soil net mineralization rates with dissolved organic carbon additions. <i>Soil Biology and Biochemistry</i> , 2000 , 32, 597-601	7.5	98
42	Exchange of N ₂ O and CH ₄ between the atmosphere and soils in spruce-fir forests in the northeastern United States. <i>Biogeochemistry</i> , 1992 , 18, 119-135	3.8	95
41	Comparison of wet chemistry and near infrared reflectance measurements of carbon-fraction chemistry and nitrogen concentration of forest foliage. <i>Canadian Journal of Forest Research</i> , 1991 , 21, 1689-1693	1.9	87
40	Using Mechanistic Models to Scale Ecological Processes across Space and Time. <i>BioScience</i> , 2003 , 53, 68	5.7	86
39	Evaluation of an integrated biogeochemical model (PnET-BGC) at a northern hardwood forest ecosystem. <i>Water Resources Research</i> , 2001 , 37, 1057-1070	5.4	85
38	The influence of substrate quality and stream size on wood decomposition dynamics. <i>Oecologia</i> , 1983 , 58, 281-285	2.9	85
37	Long-term Decreases in Stream Nitrate: Successional Causes Unlikely; Possible Links to DOC?. <i>Ecosystems</i> , 2005 , 8, 334-337	3.9	82
36	Forest ecosystem response to four years of chronic nitrate and sulfate additions at Bear Brooks Watershed, Maine, USA. <i>Forest Ecology and Management</i> , 1996 , 84, 29-37	3.9	75
35	Gross nitrogen process rates in temperate forest soils exhibiting symptoms of nitrogen saturation. <i>Forest Ecology and Management</i> , 2004 , 196, 129-142	3.9	73
34	Nitrogen Controls on Fine Root Substrate Quality in Temperate Forest Ecosystems. <i>Ecosystems</i> , 2000 , 3, 57-69	3.9	66
33	Immobilization of a N-labeled nitrate addition by decomposing forest litter. <i>Oecologia</i> , 1996 , 105, 141-150	3.9	66
32	Estimating regional forest productivity and water yield using an ecosystem model linked to a GIS. <i>Landscape Ecology</i> , 1998 , 13, 323-334	4.3	65
31	Red spruce ecosystem level changes following 14 years of chronic N fertilization. <i>Forest Ecology and Management</i> , 2005 , 219, 279-291	3.9	64
30	Predicting the effects of different harvesting regimes on productivity and yield in northern hardwoods. <i>Canadian Journal of Forest Research</i> , 1979 , 9, 10-14	1.9	63
29	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. <i>Plant and Soil</i> , 2000 , 222, 119-137	4.2	51
28	Fluxes of greenhouse gases between soils and the atmosphere in a temperate forest following a simulated hurricane blowdown. <i>Biogeochemistry</i> , 1993 , 21, 61-71	3.8	49

27	Decomposing litter as a sink for N-enriched additions to an oak forest and a red pine plantation. <i>Forest Ecology and Management</i> , 2004 , 196, 71-87	3.9	46
26	Analyses of Forest Foliage III: Determining Nitrogen, Lignin and Cellulose in Fresh Leaves Using near Infrared Reflectance Data. <i>Journal of Near Infrared Spectroscopy</i> , 1994 , 2, 25-32	1.5	45
25	Leaching of nutrient cations from the forest floor: effects of nitrogen saturation in two long-term manipulations. <i>Canadian Journal of Forest Research</i> , 1999 , 29, 609-620	1.9	39
24	Redistributions of ¹⁵ N highlight turnover and replenishment of mineral soil organic N as a long-term control on forest C balance. <i>Forest Ecology and Management</i> , 2004 , 196, 109-127	3.9	37
23	Spatial variability of digital soil maps and its impact on regional ecosystem modeling. <i>Ecological Modelling</i> , 1995 , 82, 1-10	3	31
22	Analyses of Forest Foliage II: Measurement of Carbon Fraction and Nitrogen Content by End-Member Analysis. <i>Journal of Near Infrared Spectroscopy</i> , 1994 , 2, 15-23	1.5	31
21	Nor Gloom of Night: A New Conceptual Model for the Hubbard Brook Ecosystem Study. <i>BioScience</i> , 2004 , 54, 139	5.7	29
20	Energy recovery from commercial-scale composting as a novel waste management strategy. <i>Applied Energy</i> , 2018 , 211, 194-199	10.7	29
19	Heat Recovery from Composting: A Comprehensive Review of System Design, Recovery Rate, and Utilization. <i>Compost Science and Utilization</i> , 2017 , 25, S11-S22	1.2	28
18	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. <i>Ecosystems</i> , 1999 , 2, 555-570	3.9	26
17	Carbon budget of the Harvard Forest Long-Term Ecological Research site: pattern, process, and response to global change. <i>Ecological Monographs</i> , 2020 , 90, e01423	9	26
16	Primary production and nitrogen allocation of field grown sugar maples in relation to nitrogen availability. <i>Biogeochemistry</i> , 1985 , 1, 135-154	3.8	25
15	A strategy for the regional analysis of the effects of physical and chemical climate change on biogeochemical cycles in northeastern (U.S.) forests. <i>Ecological Modelling</i> , 1993 , 67, 37-47	3	24
14	Leaf Production During Secondary Succession in Northern Hardwoods. <i>Ecology</i> , 1980 , 61, 200-204	4.6	20
13	A N tracer technique for assessing fine root production and mortality. <i>Oecologia</i> , 1997 , 112, 300-304	2.9	18
12	Application of the forest-soil-water model (PnET-BGC/CHESS) to the Lysina catchment, Czech Republic. <i>Ecological Modelling</i> , 1999 , 120, 9-30	3	18
11	Influence of excess nitrogen deposition on a white spruce (<i>Picea glauca</i>) stand in southern Alaska. <i>Biogeochemistry</i> , 1997 , 38, 173-187	3.8	17
10	US National Climate Change Assessment on Forest Ecosystems: An Introduction. <i>BioScience</i> , 2001 , 51, 720	5.7	17

9	Application of pnet-cn/chess to a spruce stand in Solling, Germany. <i>Ecological Modelling</i> , 1995 , 83, 163-172		17
8	Analyses of Forest Foliage I: Laboratory Procedures for Proximate Carbon Fractionation and Nitrogen Determination. <i>Journal of Near Infrared Spectroscopy</i> , 1994 , 2, 5-14	1.5	17
7	Restoration Ecology: An Environmental Middle Ground. <i>BioScience</i> , 1985 , 35, 399-399	5.7	14
6	A comparison of mapped estimates of long-term runoff in the northeast United States. <i>Journal of Hydrology</i> , 1998 , 206, 176-190	6	12
5	Assessing nitrogen fluxes from roots to soil associated to rhizodeposition by apple (<i>Malus domestica</i>) trees. <i>Trees - Structure and Function</i> , 2007 , 21, 499-505	2.6	12
4	A national critical loads framework for atmospheric deposition effects assessment: IV. Model selection, applications, and critical loads mapping. <i>Environmental Management</i> , 1993 , 17, 355-363	3.1	9
3	Case Study: Economic viability of producing animal bedding from low quality and small diameter trees using a wood shaving machine. <i>The Professional Animal Scientist</i> , 2017 , 33, 771-779		1
2	Forced aeration composting, aerated static pile, and similar methods 2022 , 197-269		0
1	Utilization of Low Grade Wood for Use as Animal Bedding: A Case Study of Eastern Hemlock. <i>Journal of Forestry</i> , 2018 , 116, 520-528	1.2	