Kate J Lajtha

List of Publications by Year
in descending order

130	10,776	36203	35952
papers	citations	51 h-index	97 g-index

142	142	142	9938
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Regional nitrogen budgets and riverine N & P fluxes for the drainages to the North Atlantic Ocean: Natural and human influences. Biogeochemistry, 1996, 35, 75-139.	1.7	1,300
2	The Ecology of Soil Carbon: Pools, Vulnerabilities, and Biotic and Abiotic Controls. Annual Review of Ecology, Evolution, and Systematics, 2017, 48, 419-445.	3.8	584
3	Couplings of Watersheds and Coastal Waters: Sources and Consequences of Nutrient Enrichment in Waquoit Bay, Massachusetts. Estuaries and Coasts, 1992, 15, 443.	1.7	524
4	Title is missing!. Biogeochemistry, 2002, 57, 171-197.	1.7	396
5	Organic C and N stabilization in a forest soil: Evidence from sequential density fractionation. Soil Biology and Biochemistry, 2006, 38, 3313-3324.	4.2	370
6	NITROGEN LOADING FROM COASTAL WATERSHEDS TO RECEIVING ESTUARIES: NEW METHOD AND APPLICATION. , 1997, 7, 358-380.		334
7	Sequential density fractionation across soils of contrasting mineralogy: evidence for both microbial- and mineral-controlled soil organic matter stabilization. Biogeochemistry, 2009, 96, 209-231.	1.7	304
8	Chronic nitrogen additions suppress decomposition and sequester soil carbon in temperate forests. Biogeochemistry, 2014, 121, 305-316.	1.7	302
9	Title is missing!. Biogeochemistry, 2002, 57, 267-293.	1.7	298
10	Contribution of aboveground litter, belowground litter, and rhizosphere respiration to total soil CO2 efflux in an old growth coniferous forest. Biogeochemistry, 2005, 73, 231-256.	1.7	269
11	Regional nitrogen budgets and riverine N & P fluxes for the drainages to the North Atlantic Ocean: Natural and human influences. , 1996, , 75-139.		264
12	The Biogeochemistry of Phosphorus Cycling and Phosphorus Availability Along a Desert Soil Chronosequence. Ecology, 1988, 69, 24-39.	1.5	237
13	Density fractionation of forest soils: methodological questions and interpretation of incubation results and turnover time in an ecosystem context. Biogeochemistry, 2007, 85, 69-90.	1.7	215
14	Sources of plantâ€derived carbon and stability of organic matter in soil: implications for global change. Global Change Biology, 2009, 15, 2003-2019.	4.2	215
15	Soil enzyme activity in response to long-term organic matter manipulation. Soil Biology and Biochemistry, 2014, 70, 237-243.	4.2	206
16	The effect of water and nitrogen amendments on photosynthesis, leaf demography, and resource-use efficiency in Larrea tridentata, a desert evergreen shrub. Oecologia, 1989, 80, 341-348.	0.9	137
17	Soil extracellular enzyme activities are sensitive indicators of detrital inputs and carbon availability. Applied Soil Ecology, 2015, 92, 18-23.	2.1	123
18	Increased coniferous needle inputs accelerate decomposition of soil carbon in an old-growth forest. Forest Ecology and Management, 2009, 258, 2224-2232.	1.4	118

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19	Carbon cycling in soil. Frontiers in Ecology and the Environment, 2004, 2, 522-528.	1.9	111
20	What do we know about soil carbon destabilization?. Environmental Research Letters, 2019, 14, 083004.	2.2	106
21	Litter and Root Manipulations Provide Insights into Soil Organic Matter Dynamics and Stability. Soil Science Society of America Journal, 2014, 78, S261.	1.2	103
22	Surficial gains and subsoil losses of soil carbon and nitrogen during secondary forest development. Global Change Biology, 2015, 21, 986-996.	4.2	102
23	Plant response to variations in nitrogen availability in a desert shrubland community. Biogeochemistry, 1986, 2, 29-37.	1.7	100
24	Detrital Controls on Soil Solution N and Dissolved Organic Matter in Soils: A Field Experiment. Biogeochemistry, 2005, 76, 261-281.	1.7	99
25	Changes to particulate versus mineral-associated soil carbon after 50 years of litter manipulation in forest and prairie experimental ecosystems. Biogeochemistry, 2014, 119, 341-360.	1.7	99
26	The detrital input and removal treatment (DIRT) network: Insights into soil carbon stabilization. Science of the Total Environment, 2018, 640-641, 1112-1120.	3.9	97
27	Nutrient reabsorption efficiency and the response to phosphorus fertilization in the desert shrubLarrea tridentata (DC.) Cov.. Biogeochemistry, 1987, 4, 265-276.	1.7	95
28	Title is missing!. Biogeochemistry, 2003, 62, 87-117.	1.7	94
29	The influence of decomposing logs on soil biology and nutrient cycling in an old-growth mixed coniferous forest in Oregon, U.S.A.. Canadian Journal of Forest Research, 2003, 33, 2193-2201.	0.8	93
30	Secondary CaCO3 and precipitation of Pâ€“Ca compounds control the retention of soil P in arid ecosystems. Journal of Arid Environments, 2006, 64, 460-473.	1.2	85
31	Plant Spatial Pattern and Nutrient Distribution in Pinyon-Juniper Woodlands Along an Elevational Gradient in Northern New Mexico. International Journal of Plant Sciences, 1992, 153, 425-433.	0.6	84
32	Photosynthesis and water-use efficiency in pinyon-juniper communities along an elevation gradient in northern New Mexico. Oecologia, 1993, 94, 95-101.	0.9	81
33	The use of ion-exchange resin bags for measuring nutrient availability in an arid ecosystem. Plant and Soil, 1988, 105, 105-111.	1.8	79
34	A reanalysis of nutrient dynamics in coniferous coarse woody debris. Canadian Journal of Forest Research, 2001, 31, 1894-1902.	0.8	79
35	Alterations in forest detritus inputs influence soil carbon concentration and soil respiration in a Central-European deciduous forest. Soil Biology and Biochemistry, 2014, 74, 106-114.	4.2	79
36	Litter Input Controls on Soil Carbon in a Temperate Deciduous Forest. Soil Science Society of America Journal, 2014, 78, S66.	1.2	78

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37	Retention and leaching losses of atmospherically-derived nitrogen in the aggrading coastal watershed of Waquoit Bay, MA. Biogeochemistry, 1995, 28, 33-54.	1.7	76
38	Chemistry and Dynamics of Dissolved Organic Matter in a Temperate Coniferous Forest on Andic Soils: Effects of Litter Quality. Ecosystems, 2005, 8, 286-300.	1.6	73
39	The effect of varying nitrogen and phosphorus availability on nutrient use by Larrea tridentata, a desert evergreen shrub. Oecologia, 1988, 75, 348-353.	0.9	71
40	Long-term doubling of litter inputs accelerates soil organic matter degradation and reduces soil carbon stocks. Biogeochemistry, 2016, 127, 1-14.	1.7	71
41	Soil nitrogen availability and nitrification in Mediterranean shrublands of varying fire history and successional stage. Biogeochemistry, 1994, 26, 189.	1.7	70
42	Human-Soil Relations are Changing Rapidly: Proposals from SSSA's Cross-Divisional Soil Change Working Group. Soil Science Society of America Journal, 2011, 75, 2079-2084.	1.2	70
43	Long-term nitrogen addition suppresses microbial degradation, enhances soil carbon storage, and alters the molecular composition of soil organic matter. Biogeochemistry, 2019, 142, 299-313.	1.7	70
44	Isotopic analysis of respired CO2 during decomposition of separated soil organic matter pools. Soil Biology and Biochemistry, 2006, 38, 3279-3291.	4.2	65
45	Trends in cation, nitrogen, sulfate and hydrogen ion concentrations in precipitation in the United States and Europe from 1978 to 2010: a new look at an old problem. Biogeochemistry, 2013, 116, 303-334.	1.7	65
46	A mechanistic assessment of nutrient flushing at the catchment scale. Journal of Hydrology, 2008, 358, 268-287.	2.3	64
47	Transfer of litter-derived N to soil mineralâ€“organic associations: Evidence from decadal 15N tracer experiments. Organic Geochemistry, 2012, 42, 1489-1501.	0.9	64
48	The role of hillslope hydrology in controlling nutrient loss. Journal of Hydrology, 2009, 367, 177-187.	2.3	63
49	Chronic nitrogen fertilization and carbon sequestration in grassland soils: evidence of a microbial enzyme link. Biogeochemistry, 2015, 126, 301-313.	1.7	61
50	Soil carbon cycling proxies: Understanding their critical role in predicting climate change feedbacks. Global Change Biology, 2018, 24, 895-905.	4.2	61
51	Application of a 15 N tracer to simulate and track the fate of atmospherically deposited N in the coastal forests of the Waquoit Bay Watershed, Cape Cod, Massachusetts. Oecologia, 1997, 112, 393-402.	0.9	60
52	The imprint of coarse woody debris on soil chemistry in the western Oregon Cascades. Biogeochemistry, 2004, 71, 163-175.	1.7	58
53	Nutrient limitation may induce microbial mining for resources from persistent soil organic matter. Ecology, 2021, 102, e03328.	1.5	56
54	Trace metal concentrations in the sediments and plants of the Danube Delta, Romania. Wetlands, 1998, 18, 42-50.	0.7	55

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55	Depth trends of soil organic matter C:N and 15N natural abundance controlled by association with minerals. Biogeochemistry, 2017, 136, 237-248.	1.7	54
56	Chemical and Seasonal Controls on the Dynamics of Dissolved Organic Matter in a Coniferous Old-growth Stand in the Pacific Northwest, USA. Biogeochemistry, 2004, 71, 197-223.	1.7	51
57	Title is missing!. Biogeochemistry, 2002, 57, 239-266.	1.7	50
58	Decomposition and nutrient dynamics of litter from four species of freshwater emergent macrophytes. Hydrobiologia, 1986, 131, 215-223.	1.0	49
59	The effects of litter production and litter depth on soil microclimate in a central european deciduous forest. Plant and Soil, 2016, 398, 291-300.	1.8	49
60	Carbon gain and water use in pinyon pine-juniper woodlands of northern New Mexico: field versus phytotron chamber measurements. Tree Physiology, 1991, 9, 59-67.	1.4	48
61	Longâ€term effects of climate change on carbon storage and tree species composition in a dry deciduous forest. Global Change Biology, 2017, 23, 3154-3168.	4.2	46
62	FACTORS AFFECTING PHOSPHATE SORPTION AND PHOSPHATE RETENTION IN A DESERT ECOSYSTEM. Soil Science, 1988, 146, 160-167.	0.9	45
63	Organic matter manipulations have little effect on gross and net nitrogen transformations in two temperate forest mineral soils in the USA and central Europe. Forest Ecology and Management, 2005, 214, 320-330.	1.4	45
64	Density fractionation and 13C reveal changes in soil carbon following woody encroachment in a desert ecosystem. Biogeochemistry, 2013, 112, 409-422.	1.7	44
65	Long-term litter manipulation alters soil organic matter turnover in a temperate deciduous forest. Science of the Total Environment, 2017, 607-608, 865-875.	3.9	42
66	Soil Microbe Active Community Composition and Capability of Responding to Litter Addition after 12 Years of No Inputs. Applied and Environmental Microbiology, 2013, 79, 1385-1392.	1.4	39
67	Factors affecting phosphate sorption along a Mediterranean, dolomitic soil and vegetation chronosequence. European Journal of Soil Science, 1997, 48, 139-149.	1.8	38
68	Nitric oxide and nitrous oxide emission from Hungarian forest soils; linked with atmospheric N-deposition. Atmospheric Environment, 2006, 40, 7786-7795.	1.9	37
69	An optimized HPLC method for soil fungal biomass determination and its application to a detritus manipulation study. Journal of Microbiological Methods, 2014, 103, 124-130.	0.7	32
70	Title is missing!. Biogeochemistry, 1997, 39, 87-120.	1.7	30
71	Species effects of Ceanothus velutinus versus Pseudotsuga menziesii, Douglas-fir, on soil phosphorus and nitrogen properties in the Oregon cascades. Forest Ecology and Management, 2001, 149, 205-216.	1.4	29
72	Effects of Succession on Nitrogen Export in the West-Central Cascades, Oregon. Ecosystems, 2005, 8, 583-601.	1.6	29

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73	Transformation and retention of nitrogen in a coastal forest ecosystem. Biogeochemistry, 1998, 42, 325-343.	1.7	28
74	The landscape of soil carbon data: Emerging questions, synergies and databases. Progress in Physical Geography, 2019, 43, 707-719.	1.4	27
75	The Effects of Prescribed Burning on Nutrient Availability and Primary Production in Sandplain Grasslands. American Midland Naturalist, 1993, 130, 286.	0.2	26
76	The Fate and Retention of Organic and Inorganic 15N-Nitrogen in an Old-Growth Forest Soil in Western Oregon. Ecosystems, 2004, 7, 368.	1.6	26
77	Longâ€term Nitrogen Addition Decreases Organic Matter Decomposition and Increases Forest Soil Carbon. Soil Science Society of America Journal, 2019, 83, S82.	1.2	26
78	Nutrient uptake in eastern deciduous tree seedlings. Plant and Soil, 1994, 160, 193-199.	1.8	24
79	Forest harvest legacies control dissolved organic carbon export in small watersheds, western Oregon. Biogeochemistry, 2018, 140, 299-315.	1.7	24
80	Nitrification and nitrate reductase activity along a secondary successional gradient. Plant and Soil, 1992, 145, 1-10.	1.8	23
81	Sources of nitrate in rivers draining sixteen watersheds in the northeastern U.S.: Isotopic constraints. , 2002, , 171-197.		22
82	The Effect of CaCO3on the Uptake of Phosphorous by Two Desert Shrub Species, Larrea tridentata (DC.) Cov. and Parthenium incanum H. B. K.. Botanical Gazette, 1988, 149, 328-334.	0.6	22
83	Linking aboveground net primary productivity to soil carbon and dissolved organic carbon in complex terrain. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 1225-1236.	1.3	21
84	Effects of Detrital Inputs and Roots on Carbon Saturation Deficit of a Temperate Forest Soil. Soil Science Society of America Journal, 2014, 78, S76.	1.2	21
85	Nutrient retention and loss during ecosystem succession: revisiting a classic model. Ecology, 2020, 101, e02896.	1.5	21
86	How will a drier climate change carbon sequestration in soils of the deciduous forests of Central Europe?. Biogeochemistry, 2021, 152, 13-32.	1.7	21
87	Influence of excess nitrogen deposition on a white spruce (Picea glauca) stand in southern Alaska. Biogeochemistry, 1997, 38, 173-187.	1.7	20
88	Application of a Stir Bar Sorptive Extraction sample preparation method with HPLC for soil fungal biomass determination in soils from a detrital manipulation study. Journal of Microbiological Methods, 2017, 136, 1-5.	0.7	20
89	The carbon quality-temperature hypothesis does not consistently predict temperature sensitivity of soil organic matter mineralization in soils from two manipulative ecosystem experiments. Biogeochemistry, 2017, 136, 249-260.	1.7	20
90	Mineral stabilization of soil carbon is suppressed by live roots, outweighing influences from litter quality or quantity. Biogeochemistry, 2021, 154, 433-449.	1.7	20

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91	Molecular-level changes in soil organic matter composition after 10Âyears of litter, root and nitrogen manipulation in a temperate forest. Biogeochemistry, 2018, 141, 183-197.	1.7	19
92	Divergent controls of soil organic carbon between observations and process-based models. Biogeochemistry, 2021, 156, 5-17.	1.7	19
93	Hydrologic and forest management controls on dissolved organic matter characteristics in headwater streams of old-growth forests in the Oregon Cascades. Forest Ecology and Management, 2016, 380, 11-22.	1.4	18
94	Soil organic carbon is not just for soil scientists: measurement recommendations for diverse practitioners. Ecological Applications, 2021, 31, e02290.	1.8	18
95	SoDaH: the SOils DAta Harmonization database, an open-source synthesis of soil data from research networks, version 1.0. Earth System Science Data, 2021, 13, 1843-1854.	3.7	17
96	Mussels as bioindicators of trace metal pollution in the Danube Delta of Romania. Hydrobiologia, 1999, 392, 143-158.	1.0	16
97	How should we deal with the growing peer-review problem?. Biogeochemistry, 2010, 101, 1-3.	1.7	16
98	Cation exchange capacity of density fractions from paired conifer/grassland soils. Biology and Fertility of Soils, 2007, 43, 837-841.	2.3	15
99	Contamination effects on soil density fractions from high N or C content sodium polytungstate. Biogeochemistry, 2009, 92, 177-181.	1.7	15
100	Ecophysiology of the saguaro cactus (Carnegiea gigantea) in the Saguaro National Monument: relationship to symptoms of decline. Journal of Arid Environments, 1997, 36, 579-590.	1.2	14
101	Chlorination of soil-derived dissolved organic matter: Long term nitrogen deposition does not increase terrestrial precursors of toxic disinfection byproducts. Water Research, 2020, 185, 116271.	5.3	14
102	Dissolved carbon and nitrogen losses from forests of the Oregon Cascades over a successional gradient. Plant and Soil, 2009, 318, 185-196.	1.8	13
103	Spatial and temporal changes in ecosystem carbon pools following juniper encroachment and removal. Biogeochemistry, 2018, 140, 373-388.	1.7	13
104	Mass loss and nitrogen dynamics during the decomposition of a 15N-labeled N2-fixing epiphytic lichen, Lobaria oregana. Canadian Journal of Botany, 2003, 81, 698-705.	1.2	12
105	Fluorescent DOC characteristics are related to streamflow and pasture cover in streams of a mixed landscape. Biogeochemistry, 2018, 140, 317-340.	1.7	12
106	Dissolved organic carbon production and flux under long-term litter manipulations in a Pacific Northwest old-growth forest. Biogeochemistry, 2020, 149, 75-86.	1.7	11
107	Competing Processes Drive the Resistance of Soil Carbon to Alterations in Organic Inputs. Frontiers in Environmental Science, 2021, 9, .	1.5	11
108	Twenty years of litter manipulation reveals that above-ground litter quantity and quality controls soil organic matter molecular composition. Biogeochemistry, 2022, 159, 393-411.	1.7	11

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109	Asymmetric and symmetric warming increases turnover of litter and unprotected soil C in grassland mesocosms. Biogeochemistry, 2016, 128, 217-231.	1.7	10
110	The Path From Litter to Soil: Insights Into Soil C Cycling From Longâ€Term Input Manipulation and Highâ€Resolution Mass Spectrometry. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 1486-1497.	1.3	10
111	Homogenization of detrital leachate in an old-growth coniferous forest, OR: DOC fluorescence signatures in soils undergoing long-term litter manipulations. Plant and Soil, 2016, 408, 133-148.	1.8	9
112	Lignin properties in topsoils of a beech/oak forest after 8Âyears of manipulated litter fall: relevance of altered input and oxidation of lignin. Plant and Soil, 2013, 367, 579-589.	1.8	8
113	Chemical and seasonal controls on the dynamics of dissolved organic matter in a coniferous old-growth stand in the Pacific Northwest, USA. Biogeochemistry, 2005, 71, 197-223.	1.7	7
114	Where did all the nitrogen go? Fate of nitrogen inputs to large watersheds in the northeastern U.S.A.. , 2002, , 267-293.		7
115	NITROGEN LOADING FROM COASTAL WATERSHEDS TO RECEIVING ESTUARIES: NEW METHOD AND APPLICATION. , 1997, 7, 358.		7
116	Population dynamics and trace metal biogeochemistry of the saguaro cactus (<i>Carnegiea) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 T	0.6	6
117	The imprint of coarse woody debris on soil chemistry in the Western Oregon Cascades. Biogeochemistry, 2005, 71, 163-175.	1.7	6
118	Successional and physical controls on the retention of nitrogen in an undisturbed boreal forest ecosystem. Oecologia, 2006, 148, 602-611.	0.9	6
119	Scaling litter fall in complex terrain: A study from the western Cascades Range, Oregon. Forest Ecology and Management, 2013, 306, 118-127.	1.4	4
120	The Detrital Input and Removal Treatment (DIRT) Network. , 2017, , .		4
121	Sources of soil carbon loss during soil density fractionation: Laboratory loss or seasonally variable soluble pools?. Geoderma, 2021, 382, 114776.	2.3	4
122	Ecosystem Nutrient Balance and Dynamics. , 2000, , 249-264.		4
123	Validation of an agroecosystem process model (AGRO-BGC) on annual and perennial bioenergy feedstocks. Ecological Modelling, 2016, 321, 23-34.	1.2	3
124	Publishing scientific research in open access, hybrid, or paywall journals: what model serves all authors and all readers?. Biogeochemistry, 2019, 144, 229-231.	1.7	3
125	Biogeochemistry statement on #ShutDownSTEM and Black Lives Matter. Biogeochemistry, 2020, 149, 237-237.	1.7	2
126	Plant Ecology and Landscape Geomorphology. Ecology, 1986, 67, 824-824.	1.5	0

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127	Biochemical Cycles of Soil Nutrients. Ecology, 1987, 68, 457-458.	1.5	0
128	Comment on â€˜Kane et al. 2008. Precipitation control over inorganic nitrogen importâ€export budgets across watersheds: a synthesis of longâ€term ecological research. Ecohydrology 1(2): 105â€“117â€™. Ecohydrology, 2010, 3, 368-369.	1.1	0
129	Celebrating Biogeochemistry: over 35 years of publication. Biogeochemistry, 2021, 154, 139-140.	1.7	0
130	Forest nitrogen sinks in large eastern U.S. watersheds: estimates from forest inventory and an ecosystem model. , 2002, , 239-266.		0