Diane E Pataki

List of Publications by Year
in descending order

119 papers	10,693 citations	47006 47 h-index	38395 95 g-index
123 all docs	123 docs citations	123 times ranked	11595 citing authors

#	Article	IF	Citations
1	Progressive Nitrogen Limitation of Ecosystem Responses to Rising Atmospheric Carbon Dioxide. BioScience, 2004, 54, 731.	4.9	1,092
2	Coupling biogeochemical cycles in urban environments: ecosystem services, green solutions, and misconceptions. Frontiers in Ecology and the Environment, 2011, 9, 27-36.	4.0	656
3	The changing landscape: ecosystem responses to urbanization and pollution across climatic and societal gradients. Frontiers in Ecology and the Environment, 2008, 6, 264-272.	4.0	597
4	Greenhouse Gas Emissions from Global Cities. Environmental Science & Technology, 2009, 43, 7297-7302.	10.0	581
5	Carbon isotopes in terrestrial ecosystem pools and CO₂ fluxes. New Phytologist, 2008, 178, 24-40.	7.3	444
6	Methodology for inventorying greenhouse gas emissions from global cities. Energy Policy, 2010, 38, 4828-4837.	8.8	386
7	A synthesis of current knowledge on forests and carbon storage in the United States. , 2011, 21, 1902-1924.		354
8	Ecological homogenization of urban USA. Frontiers in Ecology and the Environment, 2014, 12, 74-81.	4.0	343
9	Trees Grow on Money: Urban Tree Canopy Cover and Environmental Justice. PLoS ONE, 2015, 10, e0122051.	2.5	329
10	Protecting climate with forests. Environmental Research Letters, 2008, 3, 044006.	5.2	313
11	Homogenization of the terrestrial water cycle. Nature Geoscience, 2020, 13, 656-658.	12.9	242
12	Transpiration in response to variation in microclimate and soil moisture in southeastern deciduous forests. Oecologia, 2001, 127, 549-559.	2.0	229
13	Transpiration of urban forests in the Los Angeles metropolitan area. , 2011, 21, 661-677.		223
14	Scaling xylem sap flux and soil water balance and calculating variance: a method for partitioning water flux in forests. Annales Des Sciences ForestiÃ¨res, 1998, 55, 191-216.	1.2	208
15	Urban trees, air quality, and asthma: An interdisciplinary review. Landscape and Urban Planning, 2019, 187, 47-59.	7.5	166
16	Assessing the homogenization of urban land management with an application to US residential lawn care. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4432-4437.	7.1	164
17	SAP FLUX OF CO-OCCURRING SPECIES IN A WESTERN SUBALPINE FOREST DURING SEASONAL SOIL DROUGHT. Ecology, 2000, 81, 2557-2566.	3.2	154
18	The COVID-19 lockdowns: a window into the Earth System. Nature Reviews Earth & Environment, 2020, 1, 470-481.	29.7	153

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19	Human and biophysical legacies shape contemporary urban forests: A literature synthesis. Urban Forestry and Urban Greening, 2018, 31, 157-168.	5.3	141
20	Long-term urban carbon dioxide observations reveal spatial and temporal dynamics related to urban characteristics and growth. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2912-2917.	7.1	120
21	Urban tree planting programs, function or fashion? Los Angeles and urban tree planting campaigns. Geo Journal, 2013, 78, 475-493.	3.1	114
22	Biodiverse cities: the nursery industry, homeowners, and neighborhood differences drive urban tree composition. Ecological Monographs, 2018, 88, 259-276.	5.4	111
23	Effects of temperature and fertilization on nitrogen cycling and community composition of an urban lawn. Global Change Biology, 2008, 14, 2119-2131.	9.5	107
24	Wood anatomy constrains stomatal responses to atmospheric vapor pressure deficit in irrigated, urban trees. Oecologia, 2008, 156, 13-20.	2.0	101
25	Saturation of the Terrestrial Carbon Sink. , 2007, , 59-78.		97
26	Isotopic measurements of atmospheric methane in Los Angeles, California, USA: Influence of â€œfugitiveâ€• fossil fuel emissions. Journal of Geophysical Research, 2012, 117, .	3.3	95
27	Ecosystem services in managing residential landscapes: priorities, value dimensions, and cross-regional patterns. Urban Ecosystems, 2016, 19, 95-113.	2.4	93
28	Socioâ€ecohydrology and the urban water challenge. Ecohydrology, 2011, 4, 341-347.	2.4	88
29	Understanding preferences for tree attributes: the relative effects of socio-economic and local environmental factors. Urban Ecosystems, 2015, 18, 73-86.	2.4	84
30	The Benefits and Limits of Urban Tree Planting for Environmental and Human Health. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	83
31	Continental-scale homogenization of residential lawn plant communities. Landscape and Urban Planning, 2017, 165, 54-63.	7.5	82
32	Transpiration sensitivity of urban trees in a semi-arid climate is constrained by xylem vulnerability to cavitation. Tree Physiology, 2012, 32, 373-388.	3.1	80
33	Drivers of variability in water use of native and non-native urban trees in the greater Los Angeles area. Urban Ecosystems, 2010, 13, 393-414.	2.4	79
34	Convergence of microclimate in residential landscapes across diverse cities in the United States. Landscape Ecology, 2016, 31, 101-117.	4.2	78
35	Integrating solutions to adapt cities for climate change. Lancet Planetary Health, The, 2021, 5, e479-e486.	11.4	70
36	Ecological homogenization of residential macrosystems. Nature Ecology and Evolution, 2017, 1, 191.	7.8	69

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37	Homogenization of plant diversity, composition, and structure in North American urban yards. Ecosphere, 2018, 9, e02105.	2.2	68
38	Critical evaluation of micrometeorological methods for measuring ecosystemâ€“atmosphere isotopic exchange of CO2. Agricultural and Forest Meteorology, 2003, 116, 159-179.	4.8	66
39	Soil water depletion by oak trees and the influence of root water uptake on the moisture content spatial statistics. Water Resources Research, 1997, 33, 611-623.	4.2	64
40	Climate tolerances and trait choices shape continental patterns of urban tree biodiversity. Global Ecology and Biogeography, 2016, 25, 1367-1376.	5.8	64
41	A comparison of tracer methods for quantifying CO₂sources in an urban region. Journal of Geophysical Research, 2010, 115, .	3.3	63
42	Tree diversity in southern California's urban forest: the interacting roles of social and environmental variables. Frontiers in Ecology and Evolution, 2015, 3, .	2.2	63
43	Moving Towards a New Urban Systems Science. Ecosystems, 2017, 20, 38-43.	3.4	63
44	Plant water-use efficiency as a metric of urban ecosystem services. , 2011, 21, 3115-3127.		62
45	Tracing Changes in Ecosystem Function under Elevated Carbon Dioxide Conditions. BioScience, 2003, 53, 805.	4.9	60
46	Urban ecology: advancing science and society. Frontiers in Ecology and the Environment, 2014, 12, 574-581.	4.0	60
47	Convergent Surface Water Distributions in U.S. Cities. Ecosystems, 2014, 17, 685-697.	3.4	56
48	Evapotranspiration of urban landscapes in <scp>L</scp>os <scp>A</scp>ngeles, <scp>C</scp>alifornia at the municipal scale. Water Resources Research, 2017, 53, 4236-4252.	4.2	56
49	Effects of Urban Land-Use Change on Biogeochemical Cycles. , 2007, , 45-58.		55
50	Urban vegetation and income segregation in drylands: a synthesis of seven metropolitan regions in the southwestern United States. Environmental Research Letters, 2013, 8, 044001.	5.2	54
51	A traitâ€based ecology of the Los Angeles urban forest. Ecosphere, 2013, 4, 1-20.	2.2	53
52	Grand challenges in urban ecology. Frontiers in Ecology and Evolution, 2015, 3, .	2.2	53
53	Water sources of urban trees in the Los Angeles metropolitan area. Urban Ecosystems, 2012, 15, 195-214.	2.4	52
54	Evapotranspiration of urban lawns in a semi-arid environment: An in situ evaluation of microclimatic conditions and watering recommendations. Journal of Arid Environments, 2016, 134, 87-96.	2.4	50

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55	Elevated carbon dioxide does not affect average canopy stomatal conductance of Pinus taeda L.. Oecologia, 1998, 117, 47-52.	2.0	48
56	Spatial patterns of plant isotope tracers in the Los Angeles urban region. Landscape Ecology, 2010, 25, 35-52.	4.2	48
57	The evolution of tree nursery offerings in Los Angeles County over the last 110 years. Landscape and Urban Planning, 2013, 118, 10-17.	7.5	44
58	Nitrous oxide emissions and isotopic composition in urban and agricultural systems in southern California. Journal of Geophysical Research, 2011, 116, .	3.3	41
59	CO2 and Carbon Emissions from Cities: Linkages to Air Quality, Socioeconomic Activity, and Stakeholders in the Salt Lake City Urban Area. Bulletin of the American Meteorological Society, 2018, 99, 2325-2339.	3.3	41
60	A method for estimating transpiration of irrigated urban trees in California. Landscape and Urban Planning, 2017, 158, 48-61.	7.5	38
61	Increasing summer river discharge in southern California, USA, linked to urbanization. Geophysical Research Letters, 2013, 40, 4643-4647.	4.0	36
62	Urban plant diversity in Los Angeles, California: Species and functional type turnover in cultivated landscapes. Plants People Planet, 2020, 2, 144-156.	3.3	35
63	Nitrous Oxide Emissions from Wastewater Treatment and Water Reclamation Plants in Southern California. Journal of Environmental Quality, 2011, 40, 1542-1550.	2.0	34
64	A time series of urban forestry in Los Angeles. Urban Ecosystems, 2012, 15, 233-246.	2.4	34
65	Adding trees to irrigated turfgrass lawns may be a waterâ€saving measure in semiâ€arid environments. Ecohydrology, 2014, 7, 1314-1330.	2.4	34
66	Advancing ecohydrology in the 21st century: A convergence of opportunities. Ecohydrology, 2020, 13, e2208.	2.4	34
67	Urban soil carbon and nitrogen converge at a continental scale. Ecological Monographs, 2020, 90, e01401.	5.4	32
68	<scp>iSAW</scp>: Integrating Structure, Actors, and Water to study socioâ€hydroâ€ecological systems. Earth's Future, 2015, 3, 110-132.	6.3	31
69	Evaluating the effects of turf-replacement programs in Los Angeles. Landscape and Urban Planning, 2019, 185, 210-221.	7.5	31
70	Drivers of plant species richness and phylogenetic composition in urban yards at the continental scale. Landscape Ecology, 2019, 34, 63-77.	4.2	31
71	Plant nitrogen concentration and isotopic composition in residential lawns across seven US cities. Oecologia, 2016, 181, 271-285.	2.0	29
72	The economic value of local water supplies in Los Angeles. Nature Sustainability, 2018, 1, 289-297.	23.7	29

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73	Effects of vegetation on the spatial and temporal variation of microclimate in the urbanized Salt Lake Valley. Agricultural and Forest Meteorology, 2021, 296, 108211.	4.8	27
74	Water relations of coast redwood planted in the semiâ€arid climate of southern California. Plant, Cell and Environment, 2011, 34, 1384-1400.	5.7	26
75	Urban greening needs better data. Nature, 2013, 502, 624-624.	27.8	26
76	Satisfaction, water and fertilizer use in the American residential macrosystem. Environmental Research Letters, 2016, 11, 034004.	5.2	26
77	Linking yard plant diversity to homeownersâ€™ landscaping priorities across the U.S. Landscape and Urban Planning, 2020, 196, 103730.	7.5	23
78	Emerging topics in stable isotope ecology: are there isotope effects in plant respiration?. New Phytologist, 2005, 167, 321-323.	7.3	22
79	Nitrogen budgets of urban lawns under three different management regimes in southern California. Biogeochemistry, 2014, 121, 127-148.	3.5	22
80	Systems Analysis and Optimization of Local Water Supplies in Los Angeles. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	2.6	22
81	Sediment chemistry of urban stormwater ponds and controls on denitrification. Ecosphere, 2018, 9, e02318.	2.2	22
82	Soil carbon and nitrogen accumulation in residential lawns of the Salt Lake Valley, Utah. Oecologia, 2018, 187, 1107-1118.	2.0	22
83	A comparative study of the water budgets of lawns under three management scenarios. Urban Ecosystems, 2014, 17, 1095-1117.	2.4	21
84	Predicting tree species richness in urban forests. Urban Ecosystems, 2017, 20, 839-849.	2.4	20
85	A multi-city comparison of front and backyard differences in plant species diversity and nitrogen cycling in residential landscapes. Landscape and Urban Planning, 2018, 178, 102-111.	7.5	20
86	Research needs for finely resolved fossil carbon emissions. Eos, 2007, 88, 542-543.	0.1	19
87	Incorporating human behaviors into theories of urban community assembly and species coexistence. Oikos, 2021, 130, 1849-1864.	2.7	19
88	Seasonal variations in plant nitrogen relations and photosynthesis along a grassland to shrubland gradient in Owens Valley, California. Plant and Soil, 2010, 327, 213-223.	3.7	18
89	Ecosystem effects of groundwater depth in Owens Valley, California. Ecohydrology, 2011, 4, 458-468.	2.4	18
90	Spatiotemporal variability in water sources of urban soils and trees in the semiarid, irrigated Salt Lake Valley. Ecohydrology, 2019, 12, e2154.	2.4	17

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91	Vehicle emissions and fertilizer impact the leaf chemistry of urban trees in Salt Lake Valley, UT. Environmental Pollution, 2019, 254, 112984.	7.5	17
92	Adapting Urban Water Systems to Manage Scarcity in the 21st Century: The Case of Los Angeles. Environmental Management, 2019, 63, 293-308.	2.7	17
93	Greenhouse Gas Emissions from Global Cities. Environmental Science & Technology, 2011, 45, 3816-3817.	10.0	16
94	Drivers of spatial variability in urban plant and soil isotopic composition in the Los Angeles basin. Plant and Soil, 2012, 350, 323-338.	3.7	16
95	Evapotranspiration and water yield of a pineâ€broadleaf forest are not altered by longâ€term atmospheric [CO₂] enrichment under native or enhanced soil fertility. Global Change Biology, 2018, 24, 4841-4856.	9.5	16
96	Comments on â€œModeled PM2.5 removal by trees in ten U.S. cities and associated health effectsâ€•by Nowak etÂal. (2013). Environmental Pollution, 2014, 191, 256.	7.5	15
97	The Carbon Isotope Composition of Plants and Soils as Biomarkers of Pollution. , 2010, , 407-423.		15
98	Stable Isotopes as a Tool in Urban Ecology. , 2005, , 199-214.		14
99	The radiocarbon composition of tree rings as a tracer of local fossil fuel emissions in the Los Angeles basin: 1980â€“2008. Journal of Geophysical Research, 2012, 117, .	3.3	14
100	Assessing climate risk to support urban forests in a changing climate. Plants People Planet, 2022, 4, 201-213.	3.3	13
101	Response to authors' reply regarding â€œModeled PM2.5 removal by trees in ten U.S. cities and associated health effectsâ€•by Nowak etÂal. (2013). Environmental Pollution, 2014, 191, 258-259.	7.5	12
102	Water Smart Cities Increase Irrigation to Provide Cool Refuge in a Climate Crisis. Earth's Future, 2021, 9, e2020EF001806.	6.3	12
103	The application of Î´¹⁸O and Î´D for understanding water pools and fluxes in a Typha marsh. Plant, Cell and Environment, 2011, 34, 1761-1775.	5.7	10
104	Threats of future climate change and land use to vulnerable tree species native to Southern California. Environmental Conservation, 2015, 42, 127-138.	1.3	10
105	Plant biodiversity in residential yards is influenced by peopleâ€™s preferences for variety but limited by their income. Landscape and Urban Planning, 2021, 214, 104149.	7.5	10
106	Do arid species use less water than mesic species in an irrigated common garden?. Urban Ecosystems, 2012, 15, 215-232.	2.4	8
107	Climate and lawn management interact to control C4plant distribution in residential lawns across seven U.S. cities. Ecological Applications, 2019, 29, e01884.	3.8	8
108	Atmospheric CO 2 , climate and evolution â€“ lessons from the past. New Phytologist, 2002, 154, 10-12.	7.3	6

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109	How the Nonhuman World Influences Homeowner Yard Management in the American Residential Macrosystem. Human Ecology, 2020, 48, 347-356.	1.4	6
110	Insights from Stable Isotopes on the Role of Terrestrial Ecosystems in the Global Carbon Cycle. , 2007, , 37-44.		5
111	A multi-city urban atmospheric greenhouse gas measurement data synthesis. Scientific Data, 2022, 9, .	5.3	5
112	Housing Age and Affluence Influence Plant and Soil Nitrogen and Carbon Cycles in Two Semiarid Cities. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3178-3192.	3.0	4
113	Using LiDAR to assess transitions in riparian vegetation structure along a ruralâ€toâ€urban land use gradient in western North America. Ecohydrology, 2021, 14, .	2.4	4
114	Does vapor pressure deficit drive the seasonality of Î´13 C of the net landâ€atmosphere CO 2 exchange across the United States?. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 1969-1987.	3.0	3
115	Ethical considerations of urban ecological design and planning experiments. Plants People Planet, 2021, 3, 737-746.	3.3	2
116	The Wasatch Environmental Observatory: A mountain to urban research network in the semiâ€arid western US. Hydrological Processes, 2021, 35, e14352.	2.6	2
117	On the Definition of Cultivated Ecology. Philosophical Topics, 2019, 47, 181-201.	0.3	1
118	Badro, Brodsky, and Pataki Receive 2008 James B. Macelwane Medals. Eos, 2009, 90, 84-85.	0.1	0
119	THIRTY-NINE. Urban Ecosystems. , 2019, , 885-896.		0