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	Assessing climate risk to support urban forests in a changing climate. Plants People Planet, 2022, 4, 201-213.	3.3	13
2	A multi-city urban atmospheric greenhouse gas measurement data synthesis. Scientific Data, 2022, 9, .	5.3	5
3	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
4	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
5	Water Smart Cities Increase Irrigation to Provide Cool Refuge in a Climate Crisis. Earth's Future, 2021, 9, e2020EF001806.	6.3	12
6	The Benefits and Limits of Urban Tree Planting for Environmental and Human Health. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	83
7	Ethical considerations of urban ecological design and planning experiments. Plants People Planet, 2021, 3, 737-746.	3.3	2
8	Integrating solutions to adapt cities for climate change. Lancet Planetary Health, The, 2021, 5, e479-e486.	11.4	70
9	Incorporating human behaviors into theories of urban community assembly and species coexistence. Oikos, 2021, 130, 1849-1864.	2.7	19
10	The Wasatch Environmental Observatory: A mountain to urban research network in the semiâ€arid western US. Hydrological Processes, 2021, 35, e14352.	2.6	2
11	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
12	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
13	Urban soil carbon and nitrogen converge at a continental scale. Ecological Monographs, 2020, 90, e01401.	5.4	32
14	Linking yard plant diversity to homeownersâ€™ landscaping priorities across the U.S. Landscape and Urban Planning, 2020, 196, 103730.	7.5	23
15	The COVID-19 lockdowns: a window into the Earth System. Nature Reviews Earth & Environment, 2020, 1, 470-481.	29.7	153
16	Homogenization of the terrestrial water cycle. Nature Geoscience, 2020, 13, 656-658.	12.9	242
17	How the Nonhuman World Influences Homeowner Yard Management in the American Residential Macrosystem. Human Ecology, 2020, 48, 347-356.	1.4	6
18	Advancing ecohydrology in the 21st century: A convergence of opportunities. Ecohydrology, 2020, 13, e2208.	2.4	34

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19	Spatiotemporal variability in water sources of urban soils and trees in the semiarid, irrigated Salt Lake Valley. Ecohydrology, 2019, 12, e2154.	2.4	17
20	Vehicle emissions and fertilizer impact the leaf chemistry of urban trees in Salt Lake Valley, UT. Environmental Pollution, 2019, 254, 112984.	7.5	17
21	Evaluating the effects of turf-replacement programs in Los Angeles. Landscape and Urban Planning, 2019, 185, 210-221.	7.5	31
22	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
23	Urban trees, air quality, and asthma: An interdisciplinary review. Landscape and Urban Planning, 2019, 187, 47-59.	7.5	166
24	THIRTY-NINE. Urban Ecosystems. , 2019, , 885-896.		0
25	Drivers of plant species richness and phylogenetic composition in urban yards at the continental scale. Landscape Ecology, 2019, 34, 63-77.	4.2	31
26	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
27	On the Definition of Cultivated Ecology. Philosophical Topics, 2019, 47, 181-201.	0.3	1
28	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
29	Biodiverse cities: the nursery industry, homeowners, and neighborhood differences drive urban tree composition. Ecological Monographs, 2018, 88, 259-276.	5.4	111
30	Homogenization of plant diversity, composition, and structure in North American urban yards. Ecosphere, 2018, 9, e02105.	2.2	68
31	Human and biophysical legacies shape contemporary urban forests: A literature synthesis. Urban Forestry and Urban Greening, 2018, 31, 157-168.	5.3	141
32	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
33	The economic value of local water supplies in Los Angeles. Nature Sustainability, 2018, 1, 289-297.	23.7	29
34	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
35	Sediment chemistry of urban stormwater ponds and controls on denitrification. Ecosphere, 2018, 9, e02318.	2.2	22
36	Soil carbon and nitrogen accumulation in residential lawns of the Salt Lake Valley, Utah. Oecologia, 2018, 187, 1107-1118.	2.0	22

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37	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
38	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
39	Ecological homogenization of residential macrosystems. Nature Ecology and Evolution, 2017, 1, 191.	7.8	69
40	Systems Analysis and Optimization of Local Water Supplies in Los Angeles. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	2.6	22
41	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
42	Continental-scale homogenization of residential lawn plant communities. Landscape and Urban Planning, 2017, 165, 54-63.	7.5	82
43	Predicting tree species richness in urban forests. Urban Ecosystems, 2017, 20, 839-849.	2.4	20
44	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
45	Moving Towards a New Urban Systems Science. Ecosystems, 2017, 20, 38-43.	3.4	63
46	A method for estimating transpiration of irrigated urban trees in California. Landscape and Urban Planning, 2017, 158, 48-61.	7.5	38
47	Plant nitrogen concentration and isotopic composition in residential lawns across seven US cities. Oecologia, 2016, 181, 271-285.	2.0	29
48	Convergence of microclimate in residential landscapes across diverse cities in the United States. Landscape Ecology, 2016, 31, 101-117.	4.2	78
49	Climate tolerances and trait choices shape continental patterns of urban tree biodiversity. Global Ecology and Biogeography, 2016, 25, 1367-1376.	5.8	64
50	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
51	Satisfaction, water and fertilizer use in the American residential macrosystem. Environmental Research Letters, 2016, 11, 034004.	5.2	26
52	Ecosystem services in managing residential landscapes: priorities, value dimensions, and cross-regional patterns. Urban Ecosystems, 2016, 19, 95-113.	2.4	93
53	<scp>iSAW</scp>: Integrating Structure, Actors, and Water to study socioâ€hydroâ€ecological systems. Earth's Future, 2015, 3, 110-132.	6.3	31
54	Grand challenges in urban ecology. Frontiers in Ecology and Evolution, 2015, 3, .	2.2	53

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55	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
56	Trees Grow on Money: Urban Tree Canopy Cover and Environmental Justice. PLoS ONE, 2015, 10, e0122051.	2.5	329
57	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
58	Understanding preferences for tree attributes: the relative effects of socio-economic and local environmental factors. Urban Ecosystems, 2015, 18, 73-86.	2.4	84
59	Adding trees to irrigated turfgrass lawns may be a waterâ€saving measure in semiâ€arid environments. Ecohydrology, 2014, 7, 1314-1330.	2.4	34
60	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
61	Ecological homogenization of urban USA. Frontiers in Ecology and the Environment, 2014, 12, 74-81.	4.0	343
62	Urban ecology: advancing science and society. Frontiers in Ecology and the Environment, 2014, 12, 574-581.	4.0	60
63	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
64	Nitrogen budgets of urban lawns under three different management regimes in southern California. Biogeochemistry, 2014, 121, 127-148.	3.5	22
65	Convergent Surface Water Distributions in U.S. Cities. Ecosystems, 2014, 17, 685-697.	3.4	56
66	A comparative study of the water budgets of lawns under three management scenarios. Urban Ecosystems, 2014, 17, 1095-1117.	2.4	21
67	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
68	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
69	Urban greening needs better data. Nature, 2013, 502, 624-624.	27.8	26
70	A traitâ€based ecology of the Los Angeles urban forest. Ecosphere, 2013, 4, 1-20.	2.2	53
71	Urban tree planting programs, function or fashion? Los Angeles and urban tree planting campaigns. Geo Journal, 2013, 78, 475-493.	3.1	114
72	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

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73	Increasing summer river discharge in southern California, USA, linked to urbanization. Geophysical Research Letters, 2013, 40, 4643-4647.	4.0	36
74	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
75	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
76	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
77	A time series of urban forestry in Los Angeles. Urban Ecosystems, 2012, 15, 233-246.	2.4	34
78	Water sources of urban trees in the Los Angeles metropolitan area. Urban Ecosystems, 2012, 15, 195-214.	2.4	52
79	Do arid species use less water than mesic species in an irrigated common garden?. Urban Ecosystems, 2012, 15, 215-232.	2.4	8
80	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
81	Greenhouse Gas Emissions from Global Cities. Environmental Science & Technology, 2011, 45, 3816-3817.	10.0	16
82	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
83	Nitrous oxide emissions and isotopic composition in urban and agricultural systems in southern California. Journal of Geophysical Research, 2011, 116, .	3.3	41
84	A synthesis of current knowledge on forests and carbon storage in the United States. , 2011, 21, 1902-1924.		354
85	Nitrous Oxide Emissions from Wastewater Treatment and Water Reclamation Plants in Southern California. Journal of Environmental Quality, 2011, 40, 1542-1550.	2.0	34
86	Transpiration of urban forests in the Los Angeles metropolitan area. , 2011, 21, 661-677.		223
87	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
88	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
89	Ecosystem effects of groundwater depth in Owens Valley, California. Ecohydrology, 2011, 4, 458-468.	2.4	18
90	Socioâ€ecohydrology and the urban water challenge. Ecohydrology, 2011, 4, 341-347.	2.4	88

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91	Plant water-use efficiency as a metric of urban ecosystem services. , 2011, 21, 3115-3127.		62
92	Spatial patterns of plant isotope tracers in the Los Angeles urban region. Landscape Ecology, 2010, 25, 35-52.	4.2	48
93	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
94	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
95	Methodology for inventorying greenhouse gas emissions from global cities. Energy Policy, 2010, 38, 4828-4837.	8.8	386
96	A comparison of tracer methods for quantifying CO₂sources in an urban region. Journal of Geophysical Research, 2010, 115, .	3.3	63
97	The Carbon Isotope Composition of Plants and Soils as Biomarkers of Pollution. , 2010, , 407-423.		15
98	Greenhouse Gas Emissions from Global Cities. Environmental Science & Technology, 2009, 43, 7297-7302.	10.0	581
99	Badro, Brodsky, and Pataki Receive 2008 James B. Macelwane Medals. Eos, 2009, 90, 84-85.	0.1	0
100	Wood anatomy constrains stomatal responses to atmospheric vapor pressure deficit in irrigated, urban trees. Oecologia, 2008, 156, 13-20.	2.0	101
101	Carbon isotopes in terrestrial ecosystem pools and CO₂ fluxes. New Phytologist, 2008, 178, 24-40.	7.3	444
102	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
103	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
104	Protecting climate with forests. Environmental Research Letters, 2008, 3, 044006.	5.2	313
105	Research needs for finely resolved fossil carbon emissions. Eos, 2007, 88, 542-543.	0.1	19
106	Effects of Urban Land-Use Change on Biogeochemical Cycles. , 2007, , 45-58.		55
107	Insights from Stable Isotopes on the Role of Terrestrial Ecosystems in the Global Carbon Cycle. , 2007, , 37-44.		5
108	Saturation of the Terrestrial Carbon Sink. , 2007, , 59-78.		97

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109	Emerging topics in stable isotope ecology: are there isotope effects in plant respiration?. New Phytologist, 2005, 167, 321-323.	7.3	22
110	Stable Isotopes as a Tool in Urban Ecology. , 2005, , 199-214.		14
111	Progressive Nitrogen Limitation of Ecosystem Responses to Rising Atmospheric Carbon Dioxide. BioScience, 2004, 54, 731.	4.9	1,092
112	Critical evaluation of micrometeorological methods for measuring ecosystemâ€“atmosphere isotopic exchange of CO2. Agricultural and Forest Meteorology, 2003, 116, 159-179.	4.8	66
113	Tracing Changes in Ecosystem Function under Elevated Carbon Dioxide Conditions. BioScience, 2003, 53, 805.	4.9	60
114	Atmospheric CO 2 , climate and evolution â€“ lessons from the past. New Phytologist, 2002, 154, 10-12.	7.3	6
115	Transpiration in response to variation in microclimate and soil moisture in southeastern deciduous forests. Oecologia, 2001, 127, 549-559.	2.0	229
116	SAP FLUX OF CO-OCCURRING SPECIES IN A WESTERN SUBALPINE FOREST DURING SEASONAL SOIL DROUGHT. Ecology, 2000, 81, 2557-2566.	3.2	154
117	Elevated carbon dioxide does not affect average canopy stomatal conductance of Pinus taeda L.. Oecologia, 1998, 117, 47-52.	2.0	48
118	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
119	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