Patricia Culligan

List of Publications by Year
in descending order

75 papers	3,090 citations	147801 31 h-index	161849 54 g-index
79 all docs	79 docs citations	79 times ranked	3860 citing authors

#	Article	IF	Citations
1	Comparing the hydrological performance of an irrigated native vegetation green roof with a conventional Sedum spp. green roof in New York City. PLoS ONE, 2022, 17, e0266593.	2.5	5
2	An Optical Soil Sensor for NPK Nutrient Detection in Smart Cities. , 2022, , .		4
3	Urban policy adaptation toward managing increasing pluvial flooding events under climate change. Journal of Environmental Planning and Management, 2021, 64, 1408-1427.	4.5	7
4	Residential electricity conservation in response to auto-generated, multi-featured, personalized eco-feedback designed for large scale applications with utilities. Energy and Buildings, 2021, 232, 110652.	6.7	5
5	Short-term apartment-level load forecasting using a modified neural network with selected auto-regressive features. Applied Energy, 2021, 287, 116509.	10.1	53
6	More than nature: Linkages between well-being and greenspace influenced by a combination of elements of nature and non-nature in a New York City urban park. Urban Forestry and Urban Greening, 2021, 61, 127081.	5.3	14
7	Urban Pluvial Flood Management Part 2: Global Perceptions and Priorities in Urban Stormwater Adaptation Management and Policy Alternatives. Water (Switzerland), 2021, 13, 2433.	2.7	3
8	Impacts of COVID-19 related stay-at-home restrictions on residential electricity use and implications for future grid stability. Energy and Buildings, 2021, 251, 111330.	6.7	19
9	A LoRaWAN-Based Environmental Sensor System for Urban Tree Health Monitoring. , 2021, , .		0
10	Identifying linkages between urban green infrastructure and ecosystem services using an expert opinion methodology. Ambio, 2020, 49, 569-583.	5.5	38
11	Plant Spike: A Low-Cost, Low-Power Beacon for Smart City Soil Health Monitoring. IEEE Internet of Things Journal, 2020, 7, 9080-9090.	8.7	12
12	MFRED, 10â€‰second interval real and reactive power for groups of 390ÂUS apartments of varying size and vintage. Scientific Data, 2020, 7, 375.	5.3	13
13	Observations of the seasonal buildup and washout of salts in urban bioswale soil. Science of the Total Environment, 2020, 722, 137834.	8.0	5
14	Green infrastructure and urban sustainability: A discussion of recent advances and future challenges based on multiyear observations in New York City. Science and Technology for the Built Environment, 2019, 25, 1113-1120.	1.7	11
15	The Role of Geotechnics in Addressing New World Problems. Springer Series in Geomechanics and Geoengineering, 2019, , 1-27.	0.1	3
16	Studying the effect of bioswales on nutrient pollution in urban combined sewer systems. Science of the Total Environment, 2019, 665, 944-958.	8.0	9
17	Data-Enabled Building Energy Savings (D-E BES). Proceedings of the IEEE, 2018, 106, 661-679.	21.3	15
18	Stormwater infiltration capacity of street tree pits: Quantifying the influence of different design and management strategies in New York City. Ecological Engineering, 2018, 111, 157-166.	3.6	22

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19	Quantifying Urban Bioswale Nitrogen Cycling in the Soil, Gas, and Plant Phases. Water (Switzerland), 2018, 10, 1627.	2.7	6
20	Bridging barriers to advance global sustainability. Nature Sustainability, 2018, 1, 324-326.	23.7	64
21	Assessing methods for predicting green roof rainfall capture: A comparison between full-scale observations and four hydrologic models. Urban Water Journal, 2017, 14, 589-603.	2.1	43
22	Citizen science-based water quality monitoring: Constructing a large database to characterize the impacts of combined sewer overflow in New York City. Science of the Total Environment, 2017, 580, 168-177.	8.0	39
23	Design and Modeling of an Adaptively Controlled Rainwater Harvesting System. Water (Switzerland), 2017, 9, 974.	2.7	25
24	Stormwater performance of a full scale rooftop farm: Runoff water quality. Ecological Engineering, 2016, 91, 195-206.	3.6	29
25	Meta-principles for developing smart, sustainable, and healthy cities. Science, 2016, 352, 940-943.	12.6	267
26	The Soil Water Apportioning Method (SWAM): An approach for long-term, low-cost monitoring of green roof hydrologic performance. Ecological Engineering, 2016, 93, 207-220.	3.6	20
27	Can varying velocity conditions be one possible explanation for differences between laboratory and field observations of bacterial transport in porous media?. Advances in Water Resources, 2016, 88, 97-108.	3.8	4
28	Evaluation of common evapotranspiration models based on measurements from two extensive green roofs in New York City. Ecological Engineering, 2015, 84, 451-462.	3.6	45
29	Energy Saving Alignment Strategy: Achieving energy efficiency in urban buildings by matching occupant temperature preferences with a buildingâ€™s indoor thermal environment. Applied Energy, 2014, 123, 209-219.	10.1	54
30	Forecasting energy consumption of multi-family residential buildings using support vector regression: Investigating the impact of temporal and spatial monitoring granularity on performance accuracy. Applied Energy, 2014, 123, 168-178.	10.1	467
31	Scale dynamics of extensive green roofs: Quantifying the effect of drainage area and rainfall characteristics on observed and modeled green roof hydrologic performance. Ecological Engineering, 2014, 73, 494-508.	3.6	92
32	Quantifying Evapotranspiration from Urban Green Roofs: A Comparison of Chamber Measurements with Commonly Used Predictive Methods. Environmental Science & Technology, 2014, 48, 10273-10281.	10.0	42
33	Effective Stress and Shear Strength of Moist Uniform Spheres. Vadose Zone Journal, 2014, 13, 1-13.	2.2	6
34	Can social influence drive energy savings? Detecting the impact of social influence on the energy consumption behavior of networked users exposed to normative eco-feedback. Energy and Buildings, 2013, 66, 119-127.	6.7	96
35	Investigating the impact eco-feedback information representation has on building occupant energy consumption behavior and savings. Energy and Buildings, 2013, 64, 408-414.	6.7	95
36	Transport of <i>E. coli</i> in aquifer sediments of Bangladesh: Implications for widespread microbial contamination of groundwater. Water Resources Research, 2013, 49, 3897-3911.	4.2	19

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37	Unsealed tubewells lead to increased fecal contamination of drinking water. Journal of Water and Health, 2012, 10, 565-578.	2.6	43
38	The impact of place-based affiliation networks on energy conservation: An holistic model that integrates the influence of buildings, residents and the neighborhood context. Energy and Buildings, 2012, 55, 637-646.	6.7	63
39	Implications of Fecal Bacteria Input from Latrine-Polluted Ponds for Wells in Sandy Aquifers. Environmental Science & Technology, 2012, 46, 1361-1370.	10.0	42
40	Comparison of fecal indicators with pathogenic bacteria and rotavirus in groundwater. Science of the Total Environment, 2012, 431, 314-322.	8.0	122
41	Fecal Contamination of Shallow Tubewells in Bangladesh Inversely Related to Arsenic. Environmental Science & Technology, 2011, 45, 1199-1205.	10.0	74
42	Increase in Diarrheal Disease Associated with Arsenic Mitigation in Bangladesh. PLoS ONE, 2011, 6, e29593.	2.5	30
43	Hand-pumps as reservoirs for microbial contamination of well water. Journal of Water and Health, 2011, 9, 708-717.	2.6	37
44	Confined Liquid Flow in Nanotube: A Numerical Study and Implications for Energy Absorption. Journal of Computational and Theoretical Nanoscience, 2010, 7, 379-387.	0.4	9
45	Electrolyte solution transport in electropolar nanotubes. Journal of Physics Condensed Matter, 2010, 22, 315301.	1.8	20
46	Testing of Intrinsic Sorptivity for Liquid Infiltration into Initially Dry, Millerâ€•Similar Silica Sands. Vadose Zone Journal, 2009, 8, 462-469.	2.2	2
47	Thermally Responsive Fluid Behaviors in Hydrophobic Nanopores. Langmuir, 2009, 25, 11862-11868.	3.5	29
48	Experimental Study on Energy Dissipation of Electrolytes in Nanopores. Langmuir, 2009, 25, 12687-12696.	3.5	37
49	Mechanisms of water infiltration into conical hydrophobic nanopores. Physical Chemistry Chemical Physics, 2009, 11, 6520.	2.8	43
50	Thermal effect on the dynamic infiltration of water into single-walled carbon nanotubes. Physical Review E, 2009, 80, 061206.	2.1	27
51	Nanoscale Fluid Transport: Size and Rate Effects. Nano Letters, 2008, 8, 2988-2992.	9.1	225
52	Understanding Two-Phase Transport in Porous Media: What Challenges Still Remain?. , 2008, , .		1
53	Intrinsic Sorptivity for Soils with Different Average Grain Size Diameters. , 2008, , .		1
54	Design of an Instrumented Model Green Roof Experiment. , 2008, , .		0

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55	Method for Visualizing Coupled Particle and Fluid Transport in Porous Media. , 2008, , .		0
56	Intrinsic Sorptivity and Water Infiltration into Dry Soil at Different Degrees of Saturation. , 2007, , .		5
57	Visualization of particle behavior within a porous medium: Mechanisms for particle filtration and retardation during downward transport. Water Resources Research, 2006, 42, .	4.2	73
58	Non-aqueous phase liquid behavior in the subsurface. , 2006, , .		4
59	Sorptivity and liquid infiltration into dry soil. Advances in Water Resources, 2005, 28, 1010-1020.	3.8	32
60	Illuminating reactive microbial transport in saturated porous media: Demonstration of a visualization method and conceptual transport model. Journal of Contaminant Hydrology, 2005, 77, 233-245.	3.3	25
61	A new technique for rapid measurement of continuous soil moisture characteristic curves. Geotechnique, 2004, 54, 179-186.	4.0	2
62	Comment on â€œCavitation during desaturation of porous media under tensionâ€• by Dani Or and Markus Tuller. Water Resources Research, 2003, 39, .	4.2	9
63	Modelling of DNAPL behavior in vertical fractures. International Journal of Physical Modelling in Geotechnics, 2003, 3, 01-18.	0.6	5
64	Preferential Flow of a Nonaqueous Phase Liquid in Dry Sand. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2002, 128, 327-337.	3.0	8
65	Use of the geotechnical centrifuge as a tool to model dense nonaqueous phase liquid migration in fractures. Water Resources Research, 2002, 38, 34-1-34-12.	4.2	11
66	Use of NMR relaxation times to differentiate mobile and immobile pore fractions in a wetland soil. Water Resources Research, 2001, 37, 837-842.	4.2	9
67	Spinning Drop Tensiometry Using a Square Section Sample Tube. Journal of Colloid and Interface Science, 2001, 234, 442-444.	9.4	3
68	Centrifuge modeling of air sparging â€" a study of air flow through saturated porous media. Journal of Hazardous Materials, 2000, 72, 179-215.	12.4	32
69	Infiltration with controlled air escape. Water Resources Research, 2000, 36, 781-785.	4.2	27
70	Analysis of split operator methods for nonlinear and multispecies groundwater chemical transport models. Mathematics and Computers in Simulation, 1997, 43, 331-341.	4.4	45
71	Temporal discretisation errors in non-iterative split-operator approaches to solving chemical reaction/groundwater transport models. Journal of Contaminant Hydrology, 1996, 22, 1-17.	3.3	66
72	Real values of the W -function. ACM Transactions on Mathematical Software, 1995, 21, 161-171.	2.9	90

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73	Mass transfer in soils with local stratification of hydraulic conductivity. Water Resources Research, 1994, 30, 2891-2900.	4.2	68
74	Accelerated physical modelling of hazardous-waste transport. Geotechnique, 1991, 41, 447-466.	4.0	32
75	An approximate solution to contaminant transport by parabolic isochrones. Geotechnique, 1990, 40, 285-291.	4.0	0