Laura C Bowling

List of Publications by Year
in descending order

74	3,577	117625	138484
papers	citations	34 h-index	58 g-index

75	75	75	4576
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Variable infiltration capacity cold land process model updates. Global and Planetary Change, 2003, 38, 151-159.	3.5	286
2	Simulation of high-latitude hydrological processes in the Torneâ€“Kalix basin: PILPS Phase 2(e). Global and Planetary Change, 2003, 38, 1-30.	3.5	194
3	Application of a GIS-based distributed hydrology model for prediction of forest harvest effects on peak stream flow in the Pacific Northwest. Hydrological Processes, 1998, 12, 889-904.	2.6	148
4	Reclaiming freshwater sustainability in the Cadillac Desert. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21263-21269.	7.1	136
5	Modeling the Effects of Lakes and Wetlands on the Water Balance of Arctic Environments. Journal of Hydrometeorology, 2010, 11, 276-295.	1.9	124
6	The role of surface storage in a low-gradient Arctic watershed. Water Resources Research, 2003, 39, .	4.2	114
7	Optimal selection and placement of BMPs and LID practices with a rainfall-runoff model. Environmental Modelling and Software, 2016, 80, 281-296.	4.5	113
8	Methane emissions from western Siberian wetlands: heterogeneity and sensitivity to climate change. Environmental Research Letters, 2007, 2, 045015.	5.2	110
9	Simulation of high latitude hydrological processes in the Torneâ€“Kalix basin: PILPS Phase 2(e). Global and Planetary Change, 2003, 38, 31-53.	3.5	106
10	Parameterization of Blowing-Snow Sublimation in a Macroscale Hydrology Model. Journal of Hydrometeorology, 2004, 5, 745-762.	1.9	105
11	Hydrologic effects of logging in western Washington, United States. Water Resources Research, 2000, 36, 3223-3240.	4.2	102
12	A regional scale assessment of land use/land cover and climatic changes on water and energy cycle in the upper Midwest United States. International Journal of Climatology, 2010, 30, 2025-2044.	3.5	99
13	The impact of urban development on hydrologic regime from catchment to basin scales. Landscape and Urban Planning, 2011, 103, 237-247.	7.5	95
14	Streamflow simulations of the terrestrial Arctic domain. Journal of Geophysical Research, 2005, 110, .	3.3	93
15	Regional hydrologic response to climate change in the conterminous United States using high-resolution hydroclimate simulations. Global and Planetary Change, 2016, 143, 100-117.	3.5	92
16	Influence of climate model biases and dailyâ€scale temperature and precipitation events on hydrological impacts assessment: A case study of the United States. Journal of Geophysical Research, 2010, 115, .	3.3	86
17	Nearâ€term acceleration of hydroclimatic change in the western U.S.. Journal of Geophysical Research D: Atmospheres, 2013, 118, 10,676.	3.3	86
18	Estimation of the effects of climate variability on crop yield in the Midwest USA. Agricultural and Forest Meteorology, 2016, 216, 141-156.	4.8	78

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19	State of the Climate in 2008. Bulletin of the American Meteorological Society, 2009, 90, S1-S196.	3.3	74
20	Hydroclimatic Response of Watersheds to Urban Intensity: An Observational and Modeling-Based Analysis for the White River Basin, Indiana. Journal of Hydrometeorology, 2010, 11, 122-138.	1.9	74
21	Assessment of land cover change on the hydrology of a Brazilian headwater watershed using the Distributed Hydrology-Soil-Vegetation Model. Catena, 2016, 143, 7-17.	5.0	62
22	Separating snow, clean and debris covered ice in the Upper Indus Basin, Hindukush-Karakoram-Himalayas, using Landsat images between 1998 and 2002. Journal of Hydrology, 2015, 521, 46-64.	5.4	61
23	Corn Response to Climate Stress Detected with Satellite-Based NDVI Time Series. Remote Sensing, 2016, 8, 269.	4.0	61
24	Response of evapotranspiration and water availability to changing climate and land cover on the Mongolian Plateau during the 21st century. Global and Planetary Change, 2013, 108, 85-99.	3.5	60
25	Simulated effect of drainage water management operational strategy on hydrology and crop yield for Drummer soil in the Midwestern United States. Agricultural Water Management, 2009, 96, 653-665.	5.6	57
26	Detecting subsurface drainage systems and estimating drain spacing in intensively managed agricultural landscapes. Agricultural Water Management, 2009, 96, 627-637.	5.6	55
27	A spatially distributed model for the dynamic prediction of sediment erosion and transport in mountainous forested watersheds. Water Resources Research, 2006, 42, .	4.2	51
28	Lake Ice phenology of small lakes: Impacts of climate variability in the Great Lakes region. Global and Planetary Change, 2011, 76, 166-185.	3.5	49
29	Impacts of drainage water management on subsurface drain flow, nitrate concentration, and nitrate loads in Indiana. Journal of Soils and Water Conservation, 2012, 67, 474-484.	1.6	47
30	Nitrate and phosphorus transport through subsurface drains under free and controlled drainage. Water Research, 2018, 142, 196-207.	11.3	46
31	Dynamics of nitrate and chloride during storm events in agricultural catchments with different subsurface drainage intensity (Indiana, USA). Journal of Hydrology, 2012, 466-467, 1-10.	5.4	45
32	Biophysical and hydrological effects of future climate change including trends in CO2, in the St. Joseph River watershed, Eastern Corn Belt. Agricultural Water Management, 2017, 180, 280-296.	5.6	44
33	Impact of Vertical Hydraulic Gradient on Rill Erodibility and Critical Shear Stress. Soil Science Society of America Journal, 2010, 74, 1914-1921.	2.2	40
34	Parameterization of Lakes and Wetlands for Energy and Water Balance Studies in the Great Lakes Region*. Journal of Hydrometeorology, 2010, 11, 1057-1082.	1.9	36
35	The effects of forest roads and harvest on catchment hydrology in a mountainous maritime environment. Water Science and Application, 2001, , 145-164.	0.3	35
36	Development and application of a distributed modeling approach to assess the watershed-scale impact of drainage water management. Agricultural Water Management, 2012, 107, 23-33.	5.6	31

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37	Standardized research protocols enable transdisciplinary research of climate variation impacts in corn production systems. Journal of Soils and Water Conservation, 2014, 69, 532-542.	1.6	31
38	Changing thermal dynamics of lakes in the Great Lakes region: Role of ice cover feedbacks. Global and Planetary Change, 2011, 75, 155-172.	3.5	29
39	Evaluation of Simulated Strategies for Reducing Nitrateâ€“Nitrogen Losses through Subsurface Drainage Systems. Journal of Environmental Quality, 2012, 41, 217-228.	2.0	28
40	Quantification of uncertainty in estimated nitrate-N loads in agricultural watersheds. Journal of Hydrology, 2014, 519, 106-116.	5.4	28
41	Impact of a two-stage ditch on channel water quality. Agricultural Water Management, 2017, 192, 126-137.	5.6	28
42	Adaptive Targeting: Engaging Farmers to Improve Targeting and Adoption of Agricultural Conservation Practices. Journal of the American Water Resources Association, 2015, 51, 973-991.	2.4	21
43	Agricultural impacts of climate change in Indiana and potential adaptations. Climatic Change, 2020, 163, 2005-2027.	3.6	21
44	Simulation of high-latitude hydrological processes in the Torneâ€“Kalix basin: PILPS Phase 2(e). Global and Planetary Change, 2003, 38, 55-71.	3.5	20
45	Soil Systems for Upscaling Saturated Hydraulic Conductivity for Hydrological Modeling in the Critical Zone. Vadose Zone Journal, 2018, 17, 1-20.	2.2	20
46	Automated Identification of Tile Lines from Remotely Sensed Data. Transactions of the ASABE, 2008, 51, 1937-1950.	1.1	18
47	Detection of changes in hydrologic system memory associated with urbanization in the Great Lakes region. Water Resources Research, 2014, 50, 3750-3763.	4.2	17
48	Outsourcing governance in Peruâ€™s integrated water resources management. Land Use Policy, 2021, 101, 105105.	5.6	17
49	Development of Strategy for SWAT Hydrologic Modeling in Data-Scarce Regions of Peru. Journal of Hydrologic Engineering - ASCE, 2021, 26, .	1.9	17
50	Comparison of two model calibration approaches and their influence on future projections under climate change in the Upper Indus Basin. Climatic Change, 2020, 163, 1227-1246.	3.6	16
51	Climate Variability and Drain Spacing Influence on Drainage Water Management System Operation. Vadose Zone Journal, 2010, 9, 43-52.	2.2	15
52	Sensitivity and Uncertainty Analysis of the L-THIA-LID 2.1 Model. Water Resources Management, 2016, 30, 4927-4949.	3.9	15
53	Estimating drain flow from measured water table depth in layered soils under free and controlled drainage. Journal of Hydrology, 2018, 556, 339-348.	5.4	12
54	Hydrologic Analysis of an Intensively Irrigated Area in Southern Peru Using a Crop-Field Scale Framework. Water (Switzerland), 2021, 13, 318.	2.7	12

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55	Effects of Controlled Drainage on Water Table Recession Rate. Transactions of the ASABE, 2017, 60, 813-821.	1.1	11
56	The Wabash Sampling Blitz: A Study on the Effectiveness of Citizen Science. Citizen Science: Theory and Practice, 2016, 1, 3.	1.2	11
57	Hydrologic controls of controlled and free draining subsurface drainage systems. Agricultural Water Management, 2019, 213, 605-615.	5.6	9
58	Groundwater Doctrine and Water Withdrawals in the United States. Water Resources Management, 2020, 34, 4037-4052.	3.9	9
59	Climate change impacts and strategies for adaptation for water resource management in Indiana. Climatic Change, 2021, 165, 1.	3.6	9
60	Coproduction Challenges in the Context of Changing Rural Livelihoods. Journal of Contemporary Water Research and Education, 2020, 171, 111-126.	0.7	9
61	Evaluation of surface ponding and runoff generation in a seasonally frozen drained agricultural field. Journal of Hydrology, 2020, 588, 124985.	5.4	8
62	Longâ€term impacts of drain spacing, crop management, and weather on nitrate leaching to subsurface drains. Journal of Environmental Quality, 2021, 50, 627-638.	2.0	8
63	Estimation of Nonpoint Source Nitrate Concentrations in Indiana Rivers Based on Agricultural Drainage in the Watershed. Journal of the American Water Resources Association, 2014, 50, 1501-1514.	2.4	7
64	Integrated Hydrologic and Hydraulic Analysis of Torrential Flood Hazard in Arequipa, Peru. Journal of Contemporary Water Research and Education, 2020, 171, 93-110.	0.7	7
65	Streamflow Impacts of Management and Environmental Change in the Upper Wabash River Basin. Journal of Hydrologic Engineering - ASCE, 2019, 24, 05018034.	1.9	6
66	Quantifying Effects of Excess Water Stress at Early Soybean Growth Stages Using Unmanned Aerial Systems. Remote Sensing, 2021, 13, 2911.	4.0	5
67	Assessment of Arequipa's Hydrometeorological Monitoring Infrastructure to Support Water Management Decisions. Journal of Contemporary Water Research and Education, 2020, 171, 27-48.	0.7	5
68	Inferring Sediment Transport Capacity from Soil Microtopography Changes on a Laboratory Hillslope. Water (Switzerland), 2021, 13, 929.	2.7	3
69	Creating a Collaboration Framework to Evaluate International Universityâ€led Water Research Partnerships. Journal of Contemporary Water Research and Education, 2020, 171, 9-26.	0.7	3
70	Development and Sensitivity Analysis of an Online Tool for Evaluating Drainage Water Recycling Decisions. Transactions of the ASABE, 2020, 63, 1991-2002.	1.1	3
71	The use of electrical conductivity to develop temporally precise breakthrough curves in tracer injection experiments. Journal of Hydrology, 2020, 588, 124998.	5.4	1
72	Addressing Water Resources and Environmental Quality Programming Needs in Arequipa, Peru. Journal of Contemporary Water Research and Education, 2021, 173, 1-12.	0.7	1

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73	Does crop insurance inhibit climate change technology adoption?. Mitigation and Adaptation Strategies for Global Change, 2022, 27, 1.	2.1	1
74	Challenges and Opportunities of International University Partnerships to Support Water Management. Journal of Contemporary Water Research and Education, 2020, 171, 1-8.	0.7	0