

# Douglas A Burns

## List of Publications by Year in descending order

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86  
papers

5,774  
citations

87723

38  
h-index

82410

72  
g-index

99  
all docs

99  
docs citations

99  
times ranked

5878  
citing authors

#	ARTICLE	IF	CITATIONS
1	Trends in precipitation chemistry across the U.S. 1985–2017: Quantifying the benefits from 30 years of Clean Air Act amendment regulation. <i>Atmospheric Environment</i> , 2021, 247, 118219.	1.9	23
2	The evolving perceptual model of streamflow generation at the Panola Mountain Research Watershed. <i>Hydrological Processes</i> , 2021, 35, e14127.	1.1	12
3	The Biscuit Brook and Neversink Reservoir watersheds: Long-term investigations of stream chemistry, soil chemistry and aquatic ecology in the Catskill Mountains, New York, <sc>USA</sc>, 1983–2020. <i>Hydrological Processes</i> , 2021, 35, e14394.	1.1	3
4	The response of streams in the Adirondack region of New York to projected changes in sulfur and nitrogen deposition under changing climate. <i>Science of the Total Environment</i> , 2021, 800, 149626.	3.9	6
5	Chronic and episodic acidification of streams along the Appalachian Trail corridor, eastern United States. <i>Hydrological Processes</i> , 2020, 34, 1498-1513.	1.1	11
6	The impact of lime additions on mercury dynamics in stream chemistry and macroinvertebrates: a comparison of watershed and direct stream addition management strategies. <i>Ecotoxicology</i> , 2020, 29, 1627-1643.	1.1	1
7	The response of stream ecosystems in the Adirondack region of New York to historical and future changes in atmospheric deposition of sulfur and nitrogen. <i>Science of the Total Environment</i> , 2020, 716, 137113.	3.9	21
8	Mercury in fish from streams and rivers in New York State: Spatial patterns, temporal changes, and environmental drivers. <i>Ecotoxicology</i> , 2020, 29, 1686-1708.	1.1	10
9	Monitoring the riverine pulse: Applying high-frequency nitrate data to advance integrative understanding of biogeochemical and hydrological processes. <i>Wiley Interdisciplinary Reviews: Water</i> , 2019, 6, e1348.	2.8	78
10	Temporal Variability in Nitrate–Discharge Relationships in Large Rivers as Revealed by High-Frequency Data. <i>Water Resources Research</i> , 2019, 55, 973-989.	1.7	39
11	Historical changes in New York State streamflow: Attribution of temporal shifts and spatial patterns from 1961 to 2016. <i>Journal of Hydrology</i> , 2019, 574, 308-323.	2.3	9
12	Unprocessed Atmospheric Nitrate in Waters of the Northern Forest Region in the U.S. and Canada. <i>Environmental Science &amp; Technology</i> , 2019, 53, 3620-3633.	4.6	34
13	A synthesis of ecosystem management strategies for forests in the face of chronic nitrogen deposition. <i>Environmental Pollution</i> , 2019, 248, 1046-1058.	3.7	19
14	Decreased atmospheric nitrogen deposition in eastern North America: Predicted responses of forest ecosystems. <i>Environmental Pollution</i> , 2019, 244, 560-574.	3.7	133
15	Response of mercury in an Adirondack (NY, USA) forest stream to watershed lime application. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 607-620.	1.7	6
16	Variation in fish mercury concentrations in streams of the Adirondack region, New York: A simplified screening approach using chemical metrics. <i>Ecological Indicators</i> , 2018, 84, 648-661.	2.6	18
17	Watershed “chemical cocktails”™: forming novel elemental combinations in Anthropocene fresh waters. <i>Biogeochemistry</i> , 2018, 141, 281-305.	1.7	62
18	Systematic variation in evapotranspiration trends and drivers across the Northeastern United States. <i>Hydrological Processes</i> , 2018, 32, 3547-3560.	1.1	28

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19	Long-term Changes in Soil and Stream Chemistry across an Acid Deposition Gradient in the Northeastern United States. <i>Journal of Environmental Quality</i> , 2018, 47, 410-418.	1.0	11
20	The response of soil and stream chemistry to decreases in acid deposition in the Catskill Mountains, New York, USA. <i>Environmental Pollution</i> , 2017, 229, 607-620.	3.7	38
21	Spatial and temporal patterns of dissolved organic matter quantity and quality in the Mississippi River Basin, 1997–2013. <i>Hydrological Processes</i> , 2017, 31, 902-915.	1.1	31
22	Modeled ecohydrological responses to climate change at seven small watersheds in the northeastern United States. <i>Global Change Biology</i> , 2017, 23, 840-856.	4.2	30
23	Approaches to stream solute load estimation for solutes with varying dynamics from five diverse small watersheds. <i>Ecosphere</i> , 2016, 7, e01298.	1.0	42
24	Effects of Harvesting Forest Biomass on Water and Climate Regulation Services: A Synthesis of Long-Term Ecosystem Experiments in Eastern North America. <i>Ecosystems</i> , 2016, 19, 271-283.	1.6	22
25	A new look at liming as an approach to accelerate recovery from acidic deposition effects. <i>Science of the Total Environment</i> , 2016, 562, 35-46.	3.9	42
26	Quantifying watershed-scale groundwater loading and in-stream fate of nitrate using high-frequency water quality data. <i>Water Resources Research</i> , 2016, 52, 330-347.	1.7	63
27	Patterns of diel variation in nitrate concentrations in the Potomac River. <i>Freshwater Science</i> , 2016, 35, 1117-1132.	0.9	14
28	Acid rain and its environmental effects: Recent scientific advances. <i>Atmospheric Environment</i> , 2016, 146, 1-4.	1.9	118
29	Regional meteorological drivers and long term trends of winter-spring nitrate dynamics across watersheds in northeastern North America. <i>Biogeochemistry</i> , 2016, 130, 247-265.	1.7	16
30	The river as a chemostat: fresh perspectives on dissolved organic matter flowing down the river continuum. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2015, 72, 1272-1285.	0.7	242
31	Mercury in the Soil of Two Contrasting Watersheds in the Eastern United States. <i>PLoS ONE</i> , 2014, 9, e86855.	1.1	13
32	An empirical approach to modeling methylmercury concentrations in an Adirondack stream watershed. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014, 119, 1970-1984.	1.3	9
33	Evaluation of High-Frequency Mean Streamwater Transit-Time Estimates Using Groundwater Age and Dissolved Silica Concentrations in a Small Forested Watershed. <i>Aquatic Geochemistry</i> , 2014, 20, 183-202.	1.5	44
34	Evaluating the efficiency of environmental monitoring programs. <i>Ecological Indicators</i> , 2014, 39, 94-101.	2.6	47
35	Hydrogeomorphology explains acidification-driven variation in aquatic biological communities in the Neversink Basin, USA. <i>Journal of Environmental Quality</i> , 2013, 42, 791-800.		2
36	Intra- and inter-basin mercury comparisons: Importance of basin scale and time-weighted methylmercury estimates. <i>Environmental Pollution</i> , 2013, 172, 42-52.	3.7	14

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37	Specific ultra-violet absorbance as an indicator of mercury sources in an Adirondack River basin. <i>Biogeochemistry</i> , 2013, 113, 451-466.	1.7	31
38	Shallow Groundwater Mercury Supply in a Coastal Plain Stream. <i>Environmental Science &amp; Technology</i> , 2012, 46, 7503-7511.	4.6	19
39	Landscape controls on total and methyl Hg in the upper Hudson River basin, New York, USA. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	41
40	The effect of seasonal drying on sulphate dynamics in streams across southeastern Canada and the northeastern USA. <i>Biogeochemistry</i> , 2012, 111, 393-409.	1.7	28
41	Spatial and Seasonal Variability of Dissolved Methylmercury in Two Stream Basins in the Eastern United States. <i>Environmental Science &amp; Technology</i> , 2011, 45, 2048-2055.	4.6	36
42	The relation of harvesting intensity to changes in soil, soil water, and stream chemistry in a northern hardwood forest, Catskill Mountains, USA. <i>Forest Ecology and Management</i> , 2011, 261, 1510-1519.	1.4	25
43	Spatial patterns of mercury in macroinvertebrates and fishes from streams of two contrasting forested landscapes in the eastern United States. <i>Ecotoxicology</i> , 2011, 20, 1530-1542.	1.1	47
44	Comparisons of watershed sulfur budgets in southeast Canada and northeast US: new approaches and implications. <i>Biogeochemistry</i> , 2011, 103, 181-207.	1.7	75
45	<i>Ecosystems</i> , 2011, , 139-229.		2
46	Relating hydrogeomorphic properties to stream buffering chemistry in the Neversink River watershed, New York State, USA. <i>Hydrological Processes</i> , 2010, 24, 3759-3771.	1.1	11
47	Hot Spots and Hot Moments in Riparian Zones: Potential for Improved Water Quality Management <sup>1</sup> . <i>Journal of the American Water Resources Association</i> , 2010, 46, 278-298.	1.0	398
48	Sources and Transformations of Nitrate from Streams Draining Varying Land Uses: Evidence from Dual Isotope Analysis. <i>Journal of Environmental Quality</i> , 2009, 38, 1149-1159.	1.0	130
49	Factors controlling nitrogen release from two forested catchments with contrasting hydrochemical responses. <i>Hydrological Processes</i> , 2008, 22, 46-62.	1.1	48
50	Changes in stream chemistry and biology in response to reduced levels of acid deposition during 1987-2003 in the Neversink River Basin, Catskill Mountains. <i>Ecological Indicators</i> , 2008, 8, 191-203.	2.6	24
51	Nitrogen immobilization by wood-chip application: Protecting water quality in a northern hardwood forest. <i>Forest Ecology and Management</i> , 2008, 255, 2589-2601.	1.4	36
52	Critical loads as a policy tool for protecting ecosystems from the effects of air pollutants. <i>Frontiers in Ecology and the Environment</i> , 2008, 6, 156-159.	1.9	67
53	Nitrogen Isotopes as Indicators of NO <sub>x</sub> Source Contributions to Atmospheric Nitrate Deposition Across the Midwestern and Northeastern United States. <i>Environmental Science &amp; Technology</i> , 2007, 41, 7661-7667.	4.6	265
54	Who needs environmental monitoring?. <i>Frontiers in Ecology and the Environment</i> , 2007, 5, 253-260.	1.9	403

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55	Recent climate trends and implications for water resources in the Catskill Mountain region, New York, USA. <i>Journal of Hydrology</i> , 2007, 336, 155-170.	2.3	138
56	Factors controlling soil water and stream water aluminum concentrations after a clearcut in a forested watershed with calcium-poor soils. <i>Biogeochemistry</i> , 2007, 84, 311-331.	1.7	40
57	Changes in stream chemistry and nutrient export following a partial harvest in the Catskill Mountains, New York, USA. <i>Forest Ecology and Management</i> , 2006, 223, 103-112.	1.4	52
58	Response of surface water chemistry to reduced levels of acid precipitation: comparison of trends in two regions of New York, USA. <i>Hydrological Processes</i> , 2006, 20, 1611-1627.	1.1	77
59	What do hydrologists mean when they use the term flushing?. <i>Hydrological Processes</i> , 2005, 19, 1325-1327.	1.1	44
60	Effects of a clearcut on the net rates of nitrification and N mineralization in a northern hardwood forest, Catskill Mountains, New York, USA. <i>Biogeochemistry</i> , 2005, 72, 123-146.	1.7	49
61	Stream acidification and mortality of brook trout ( <i>Salvelinus fontinalis</i> ) in response to timber harvest in Catskill Mountain watersheds, New York, USA. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2005, 62, 1168-1183.	0.7	20
62	Effects of suburban development on runoff generation in the Croton River basin, New York, USA. <i>Journal of Hydrology</i> , 2005, 311, 266-281.	2.3	224
63	Processes affecting the response of sulfate concentrations to clearcutting in a northern hardwood forest, Catskill Mountains, New York, U.S.A.. <i>Biogeochemistry</i> , 2004, 68, 337-354.	1.7	13
64	Are big basins just the sum of small catchments?. <i>Hydrological Processes</i> , 2004, 18, 3195-3206.	1.1	109
65	The effects of atmospheric nitrogen deposition in the Rocky Mountains of Colorado and southern Wyoming, USA—a critical review. <i>Environmental Pollution</i> , 2004, 127, 257-269.	3.7	73
66	Atmospheric nitrogen deposition in the Rocky Mountains of Colorado and southern Wyoming—a review and new analysis of past study results. <i>Atmospheric Environment</i> , 2003, 37, 921-932.	1.9	89
67	The Geochemical Evolution of Riparian Ground Water in a Forested Piedmont Catchment. <i>Ground Water</i> , 2003, 41, 913-925.	0.7	88
68	Analysis of $\delta^{15}\text{N}$ and $\delta^{18}\text{O}$ to differentiate $\text{NO}_3^-$ sources in runoff at two watersheds in the Catskill Mountains of New York. <i>Water Resources Research</i> , 2002, 38, 9-1-9-11.	1.7	187
69	Stormflow-hydrograph separation based on isotopes: the thrill is gone ? what's next?. <i>Hydrological Processes</i> , 2002, 16, 1515-1517.	1.1	92
70	Estimation of baseflow residence times in watersheds from the runoff hydrograph recession: method and application in the Neversink watershed, Catskill Mountains, New York. <i>Hydrological Processes</i> , 2002, 16, 1871-1877.	1.1	55
71	Quantifying contributions to storm runoff through end-member mixing analysis and hydrologic measurements at the Panola Mountain Research Watershed (Georgia, USA). <i>Hydrological Processes</i> , 2001, 15, 1903-1924.	1.1	299
72	Topographic controls on the chemistry of subsurface stormflow. <i>Hydrological Processes</i> , 2001, 15, 1925-1938.	1.1	62

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73	Title is missing!. Water, Air, and Soil Pollution, 2001, 132, 389-400.	1.1	20
74	Clean air act and acid precipitation receiving increased attention. Eos, 2000, 81, 134.	0.1	0
75	The role of event water, a rapid shallow flow component, and catchment size in summer stormflow. Journal of Hydrology, 1999, 217, 171-190.	2.3	254
76	SOIL CALCIUM STATUS AND THE RESPONSE OF STREAM CHEMISTRY TO CHANGING ACIDIC DEPOSITION RATES. , 1999, 9, 1059-1072.		118
77	Retention of NO <sub>3</sub> <sup>-</sup> in an upland streamenvironment: A mass balance approach. , 1998, 40, 73-96.		114
78	Effects of a beaver pond on runoff processes: comparison of two headwater catchments. Journal of Hydrology, 1998, 205, 248-264.	2.3	74
79	Relation of Climate Change to the Acidification of Surface Waters by Nitrogen Deposition. Environmental Science & Technology, 1998, 32, 1642-1647.	4.6	87
80	Streams in catskill mountains still susceptible to acid rain. Eos, 1998, 79, 197-197.	0.1	11
81	Effect of groundwater springs on NO <sub>3</sub> <sup>-</sup> concentrations during summer in Catskill Mountain streams. Water Resources Research, 1998, 34, 1987-1996.	1.7	176
82	Base cation concentrations in subsurface flow from a forested hillslope: The role of flushing frequency. Water Resources Research, 1998, 34, 3535-3544.	1.7	100
83	Effect of whole catchment liming on the episodic acidification of two adirondack streams. Biogeochemistry, 1996, 32, 299-322.	1.7	26
84	The effects of liming an Adirondack lake watershed on downstream water chemistry. Biogeochemistry, 1996, 32, 339-362.	1.7	11
85	Speciation and equilibrium relations of soluble aluminum in a headwater stream at base flow and during rain events. Water Resources Research, 1989, 25, 1653-1665.	1.7	15
86	Acidification of surface waters in two areas of the Eastern United States. Water, Air, and Soil Pollution, 1981, 16, 277-285.	1.1	25