Douglas A Burns

List of Publications by Year
in descending order

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	Who needs environmental monitoring?. Frontiers in Ecology and the Environment, 2007, 5, 253-260.	1.9	403
2	Hot Spots and Hot Moments in Riparian Zones: Potential for Improved Water Quality Management¹. Journal of the American Water Resources Association, 2010, 46, 278-298.	1.0	398
3	Quantifying contributions to storm runoff through end-member mixing analysis and hydrologic measurements at the Panola Mountain Research Watershed (Georgia, USA). Hydrological Processes, 2001, 15, 1903-1924.	1.1	299
4	Nitrogen Isotopes as Indicators of NO<i>_x</i> Source Contributions to Atmospheric Nitrate Deposition Across the Midwestern and Northeastern United States. Environmental Science & Technology, 2007, 41, 7661-7667.	4.6	265
5	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
6	The river as a chemostat: fresh perspectives on dissolved organic matter flowing down the river continuum. Canadian Journal of Fisheries and Aquatic Sciences, 2015, 72, 1272-1285.	0.7	242
7	Effects of suburban development on runoff generation in the Croton River basin, New York, USA. Journal of Hydrology, 2005, 311, 266-281.	2.3	224
8	Analysis of Î´15N and Î´18O to differentiate NO3â^'sources in runoff at two watersheds in the Catskill Mountains of New York. Water Resources Research, 2002, 38, 9-1-9-11.	1.7	187
9	Effect of groundwater springs on NO3â^'concentrations during summer in Catskill Mountain streams. Water Resources Research, 1998, 34, 1987-1996.	1.7	176
10	Recent climate trends and implications for water resources in the Catskill Mountain region, New York, USA. Journal of Hydrology, 2007, 336, 155-170.	2.3	138
11	Decreased atmospheric nitrogen deposition in eastern North America: Predicted responses of forest ecosystems. Environmental Pollution, 2019, 244, 560-574.	3.7	133
12	Sources and Transformations of Nitrate from Streams Draining Varying Land Uses: Evidence from Dual Isotope Analysis. Journal of Environmental Quality, 2009, 38, 1149-1159.	1.0	130
13	SOIL CALCIUM STATUS AND THE RESPONSE OF STREAM CHEMISTRY TO CHANGING ACIDIC DEPOSITION RATES. , 1999, 9, 1059-1072.		118
14	Acid rain and its environmental effects: Recent scientific advances. Atmospheric Environment, 2016, 146, 1-4.	1.9	118
15	Retention of NO(_3^ -) in an upland streamenvironment: A mass balance approach. , 1998, 40, 73-96.		114
16	Are big basins just the sum of small catchments?. Hydrological Processes, 2004, 18, 3195-3206.	1.1	109
17	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
18	Stormflow-hydrograph separation based on isotopes: the thrill is gone ? what's next?. Hydrological Processes, 2002, 16, 1515-1517.	1.1	92

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19	Atmospheric nitrogen deposition in the Rocky Mountains of Colorado and southern Wyomingâ€"a review and new analysis of past study results. Atmospheric Environment, 2003, 37, 921-932.	1.9	89
20	The Geochemical Evolution of Riparian Ground Water in a Forested Piedmont Catchment. Ground Water, 2003, 41, 913-925.	0.7	88
21	Relation of Climate Change to the Acidification of Surface Waters by Nitrogen Deposition. Environmental Science & Technology, 1998, 32, 1642-1647.	4.6	87
22	Monitoring the riverine pulse: Applying highâ€frequency nitrate data to advance integrative understanding of biogeochemical and hydrological processes. Wiley Interdisciplinary Reviews: Water, 2019, 6, e1348.	2.8	78
23	Response of surface water chemistry to reduced levels of acid precipitation: comparison of trends in two regions of New York, USA. Hydrological Processes, 2006, 20, 1611-1627.	1.1	77
24	Comparisons of watershed sulfur budgets in southeast Canada and northeast US: new approaches and implications. Biogeochemistry, 2011, 103, 181-207.	1.7	75
25	Effects of a beaver pond on runoff processes: comparison of two headwater catchments. Journal of Hydrology, 1998, 205, 248-264.	2.3	74
26	The effects of atmospheric nitrogen deposition in the Rocky Mountains of Colorado and southern Wyoming, USAâ€"a critical review. Environmental Pollution, 2004, 127, 257-269.	3.7	73
27	Critical loads as a policy tool for protecting ecosystems from the effects of air pollutants. Frontiers in Ecology and the Environment, 2008, 6, 156-159.	1.9	67
28	Quantifying watershedâ€scale groundwater loading and inâ€stream fate of nitrate using highâ€frequency water quality data. Water Resources Research, 2016, 52, 330-347.	1.7	63
29	Topographic controls on the chemistry of subsurface stormflow. Hydrological Processes, 2001, 15, 1925-1938.	1.1	62
30	Watershed â€˜chemical cocktailsâ€™: forming novel elemental combinations in Anthropocene fresh waters. Biogeochemistry, 2018, 141, 281-305.	1.7	62
31	Estimation of baseflow residence times in watersheds from the runoff hydrograph recession: method and application in the Neversink watershed, Catskill Mountains, New York. Hydrological Processes, 2002, 16, 1871-1877.	1.1	55
32	Changes in stream chemistry and nutrient export following a partial harvest in the Catskill Mountains, New York, USA. Forest Ecology and Management, 2006, 223, 103-112.	1.4	52
33	Effects of a clearcut on the net rates of nitrification and N mineralization in a northern hardwood forest, Catskill Mountains, New York, USA. Biogeochemistry, 2005, 72, 123-146.	1.7	49
34	Factors controlling nitrogen release from two forested catchments with contrasting hydrochemical responses. Hydrological Processes, 2008, 22, 46-62.	1.1	48
35	Spatial patterns of mercury in macroinvertebrates and fishes from streams of two contrasting forested landscapes in the eastern United States. Ecotoxicology, 2011, 20, 1530-1542.	1.1	47
36	Evaluating the efficiency of environmental monitoring programs. Ecological Indicators, 2014, 39, 94-101.	2.6	47

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37	What do hydrologists mean when they use the term flushing?. Hydrological Processes, 2005, 19, 1325-1327.	1.1	44
38	Evaluation of High-Frequency Mean Streamwater Transit-Time Estimates Using Groundwater Age and Dissolved Silica Concentrations in a Small Forested Watershed. Aquatic Geochemistry, 2014, 20, 183-202.	1.5	44
39	Approaches to stream solute load estimation for solutes with varying dynamics from five diverse small watersheds. Ecosphere, 2016, 7, e01298.	1.0	42
40	A new look at liming as an approach to accelerate recovery from acidic deposition effects. Science of the Total Environment, 2016, 562, 35-46.	3.9	42
41	Landscape controls on total and methyl Hg in the upper Hudson River basin, New York, USA. Journal of Geophysical Research, 2012, 117, .	3.3	41
42	Factors controlling soil water and stream water aluminum concentrations after a clearcut in a forested watershed with calcium-poor soils. Biogeochemistry, 2007, 84, 311-331.	1.7	40
43	Temporal Variability in Nitrateâ€Discharge Relationships in Large Rivers as Revealed by Highâ€Frequency Data. Water Resources Research, 2019, 55, 973-989.	1.7	39
44	The response of soil and stream chemistry to decreases in acid deposition in the Catskill Mountains, New York, USA. Environmental Pollution, 2017, 229, 607-620.	3.7	38
45	Nitrogen immobilization by wood-chip application: Protecting water quality in a northern hardwood forest. Forest Ecology and Management, 2008, 255, 2589-2601.	1.4	36
46	Spatial and Seasonal Variability of Dissolved Methylmercury in Two Stream Basins in the Eastern United States. Environmental Science & Technology, 2011, 45, 2048-2055.	4.6	36
47	Unprocessed Atmospheric Nitrate in Waters of the Northern Forest Region in the U.S. and Canada. Environmental Science & Technology, 2019, 53, 3620-3633.	4.6	34
48	Specific ultra-violet absorbance as an indicator of mercury sources in an Adirondack River basin. Biogeochemistry, 2013, 113, 451-466.	1.7	31
49	Spatial and temporal patterns of dissolved organic matter quantity and quality in the Mississippi River Basin, 1997â€“2013. Hydrological Processes, 2017, 31, 902-915.	1.1	31
50	Modeled ecohydrological responses to climate change at seven small watersheds in the northeastern United States. Global Change Biology, 2017, 23, 840-856.	4.2	30
51	The effect of seasonal drying on sulphate dynamics in streams across southeastern Canada and the northeastern USA. Biogeochemistry, 2012, 111, 393-409.	1.7	28
52	Systematic variation in evapotranspiration trends and drivers across the Northeastern United States. Hydrological Processes, 2018, 32, 3547-3560.	1.1	28
53	Effect of whole catchment liming on the episodic acidification of two adirondack streams. Biogeochemistry, 1996, 32, 299-322.	1.7	26
54	Acidification of surface waters in two areas of the Eastern United States. Water, Air, and Soil Pollution, 1981, 16, 277-285.	1.1	25

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55	The relation of harvesting intensity to changes in soil, soil water, and stream chemistry in a northern hardwood forest, Catskill Mountains, USA. Forest Ecology and Management, 2011, 261, 1510-1519.	1.4	25
56	Changes in stream chemistry and biology in response to reduced levels of acid deposition during 1987â€"2003 in the Neversink River Basin, Catskill Mountains. Ecological Indicators, 2008, 8, 191-203.	2.6	24
57	Trends in precipitation chemistry across the U.S. 1985â€"2017: Quantifying the benefits from 30 years of Clean Air Act amendment regulation. Atmospheric Environment, 2021, 247, 118219.	1.9	23
58	Effects of Harvesting Forest Biomass on Water and Climate Regulation Services: A Synthesis of Long-Term Ecosystem Experiments in Eastern North America. Ecosystems, 2016, 19, 271-283.	1.6	22
59	The response of stream ecosystems in the Adirondack region of New York to historical and future changes in atmospheric deposition of sulfur and nitrogen. Science of the Total Environment, 2020, 716, 137113.	3.9	21
60	Title is missing!. Water, Air, and Soil Pollution, 2001, 132, 389-400.	1.1	20
61	Stream acidification and mortality of brook trout (Salvelinus fontinalis) in response to timber harvest in Catskill Mountain watersheds, New York, USA. Canadian Journal of Fisheries and Aquatic Sciences, 2005, 62, 1168-1183.	0.7	20
62	Shallow Groundwater Mercury Supply in a Coastal Plain Stream. Environmental Science & Technology, 2012, 46, 7503-7511.	4.6	19
63	A synthesis of ecosystem management strategies for forests in the face of chronic nitrogen deposition. Environmental Pollution, 2019, 248, 1046-1058.	3.7	19
64	Variation in fish mercury concentrations in streams of the Adirondack region, New York: A simplified screening approach using chemical metrics. Ecological Indicators, 2018, 84, 648-661.	2.6	18
65	Regional meteorological drivers and long term trends of winter-spring nitrate dynamics across watersheds in northeastern North America. Biogeochemistry, 2016, 130, 247-265.	1.7	16
66	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
67	Intra- and inter-basin mercury comparisons: Importance of basin scale and time-weighted methylmercury estimates. Environmental Pollution, 2013, 172, 42-52.	3.7	14
68	Patterns of diel variation in nitrate concentrations in the Potomac River. Freshwater Science, 2016, 35, 1117-1132.	0.9	14
69	Processes affecting the response of sulfate concentrations to clearcutting in a northern hardwood forest, Catskill Mountains, New York, U.S.A.. Biogeochemistry, 2004, 68, 337-354.	1.7	13
70	Mercury in the Soil of Two Contrasting Watersheds in the Eastern United States. PLoS ONE, 2014, 9, e86855.	1.1	13
71	The evolving perceptual model of streamflow generation at the Panola Mountain Research Watershed. Hydrological Processes, 2021, 35, e14127.	1.1	12
72	The effects of liming an Adirondack lake watershed on downstream water chemistry. Biogeochemistry, 1996, 32, 339-362.	1.7	11

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73	Streams in catskill mountains still susceptible to acid rain. Eos, 1998, 79, 197-197.	0.1	11
74	Relating hydrogeomorphic properties to stream buffering chemistry in the Neversink River watershed, New York State, USA. Hydrological Processes, 2010, 24, 3759-3771.	1.1	11
75	Longâ€term Changes in Soil and Stream Chemistry across an Acid Deposition Gradient in the Northeastern United States. Journal of Environmental Quality, 2018, 47, 410-418.	1.0	11
76	Chronic and episodic acidification of streams along the Appalachian Trail corridor, eastern United States. Hydrological Processes, 2020, 34, 1498-1513.	1.1	11
77	Mercury in fish from streams and rivers in New York State: Spatial patterns, temporal changes, and environmental drivers. Ecotoxicology, 2020, 29, 1686-1708.	1.1	10
78	An empirical approach to modeling methylmercury concentrations in an Adirondack stream watershed. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1970-1984.	1.3	9
79	Historical changes in New York State streamflow: Attribution of temporal shifts and spatial patterns from 1961 to 2016. Journal of Hydrology, 2019, 574, 308-323.	2.3	9
80	Response of mercury in an Adirondack (NY, USA) forest stream to watershed lime application. Environmental Sciences: Processes and Impacts, 2018, 20, 607-620.	1.7	6
81	The response of streams in the Adirondack region of New York to projected changes in sulfur and nitrogen deposition under changing climate. Science of the Total Environment, 2021, 800, 149626.	3.9	6
82	The Biscuit Brook and Neversink Reservoir watersheds: Longâ€term investigations of stream chemistry, soil chemistry and aquatic ecology in the Catskill Mountains, New York, <scp>USA</scp>, 1983â€"2020. Hydrological Processes, 2021, 35, e14394.	1.1	3
83	Hydrogeomorphology explains acidification-driven variation in aquatic biological communities in the Neversink Basin, USA. , 2013, 23, 791-800.		2
84	Ecosystems. , 2011, , 139-229.		2
85	The impact of lime additions on mercury dynamics in stream chemistry and macroinvertebrates: a comparison of watershed and direct stream addition management strategies. Ecotoxicology, 2020, 29, 1627-1643.	1.1	1
86	Clean air act and acid precipitation receiving increased attention. Eos, 2000, 81, 134.	0.1	0