Durelle T Scott

List of Publications by Year
in descending order

57 papers	3,923 citations	201674 27 h-index	149698 56 g-index
60 all docs	60 docs citations	60 times ranked	4953 citing authors

#	Article	IF	Citations
1	Quinone Moieties Act as Electron Acceptors in the Reduction of Humic Substances by Humics-Reducing Microorganisms. Environmental Science & Technology, 1998, 32, 2984-2989.	10.0	703
2	Glaciers as a source of ancient and labile organic matter to the marine environment. Nature, 2009, 462, 1044-1047.	27.8	452
3	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.	2.4	398
4	Hyporheic zone denitrification: Controls on effective reaction depth and contribution to whole-stream mass balance. Water Resources Research, 2013, 49, 6298-6316.	4.2	269
5	Anthropogenic aerosols as a source of ancient dissolved organic matter in glaciers. Nature Geoscience, 2012, 5, 198-201.	12.9	199
6	Dissolved organic matter (DOM) concentration and quality in a forested mid-Atlantic watershed, USA. Biogeochemistry, 2012, 108, 55-76.	3.5	198
7	Fluorescence characteristics and sources of dissolved organic matter for stream water during storm events in a forested mid-Atlantic watershed. Journal of Geophysical Research, 2011, 116, .	3.3	155
8	Riverine organic matter and nutrients inÂsoutheast Alaska affected by glacialÂcoverage. Nature Geoscience, 2008, 1, 583-587.	12.9	140
9	On the role of groundwater and soil texture in the regional water balance: An investigation of the Nebraska Sand Hills, USA. Water Resources Research, 2009, 45, .	4.2	98
10	An evaluation of HSPF and SWMM for simulating streamflow regimes in an urban watershed. Environmental Modelling and Software, 2019, 118, 211-225.	4.5	75
11	How Hydrologic Connectivity Regulates Water Quality in River Corridors. Journal of the American Water Resources Association, 2019, 55, 369-381.	2.4	75
12	Temporal variation in endâ€member chemistry and its influence on runoff mixing patterns in a forested, Piedmont catchment. Water Resources Research, 2013, 49, 1828-1844.	4.2	74
13	Stream temperature response to variable glacier coverage in coastal watersheds of Southeast Alaska. Hydrological Processes, 2014, 28, 2062-2073.	2.6	68
14	Thresholds of lake and reservoir connectivity in river networks control nitrogen removal. Nature Communications, 2018, 9, 2779.	12.8	68
15	Redox Processes Controlling Manganese Fate and Transport in a Mountain Stream. Environmental Science & Technology, 2002, 36, 453-459.	10.0	61
16	Perspectives on Harmful Algal Blooms (HABs) and the Cyberbiosecurity of Freshwater Systems. Frontiers in Bioengineering and Biotechnology, 2019, 7, 128.	4.1	60
17	Automated calibration of a stream solute transport model: implications for interpretation of biogeochemical parameters. Journal of the North American Benthological Society, 2003, 22, 492-510.	3.1	58
18	Quantifying spatiotemporal variation in headwater stream length using flow intermittency sensors. Environmental Monitoring and Assessment, 2019, 191, 226.	2.7	54

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19	Comparison of Two PARAFAC Models of Dissolved Organic Matter Fluorescence for a Mid-Atlantic Forested Watershed in the USA. Journal of Ecosystems, 2013, 2013, 1-16.	0.7	49
20	Sensitivity analysis of conservative and reactive stream transient storage models applied to field data from multiple-reach experiments. Advances in Water Resources, 2005, 28, 479-492.	3.8	47
21	Small Ponds in Headwater Catchments Are a Dominant Influence on Regional Nutrient and Sediment Budgets. Geophysical Research Letters, 2019, 46, 9669-9677.	4.0	45
22	Floodplain biogeochemical processing of floodwaters in the Atchafalaya River Basin during the Mississippi River flood of 2011. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 537-546.	3.0	39
23	Effects of inset floodplains and hyporheic exchange induced by in-stream structures on nitrate removal in a headwater stream. Ecological Engineering, 2016, 97, 452-464.	3.6	38
24	Floodplain inundation spectrum across the United States. Nature Communications, 2019, 10, 5194.	12.8	36
25	Comparison of effects of inset floodplains and hyporheic exchange induced by inâ€stream structures on solute retention. Water Resources Research, 2014, 50, 6168-6190.	4.2	34
26	Effects of in-stream structures and channel flow rate variation on transient storage. Journal of Hydrology, 2017, 548, 157-169.	5.4	34
27	Seasonal Variation in Floodplain Biogeochemical Processing in a Restored Headwater Stream. Environmental Science & Technology, 2015, 49, 13190-13198.	10.0	30
28	The effects of land use characteristics on urban stormwater quality and watershed pollutant loads. Science of the Total Environment, 2021, 773, 145358.	8.0	30
29	Do transient storage parameters directly scale in longer, combined stream reaches? Reach length dependence of transient storage interpretations. Journal of Hydrology, 2013, 483, 16-25.	5.4	28
30	Perirheic mixing and biogeochemical processing in flowâ€through and backwater floodplain wetlands. Water Resources Research, 2014, 50, 7394-7405.	4.2	28
31	Comparing reach scale hyporheic exchange and denitrification induced by instream restoration structures and natural streambed morphology. Ecological Engineering, 2018, 115, 105-121.	3.6	23
32	Effects of large wood on floodplain connectivity in a headwater Mid-Atlantic stream. Ecological Engineering, 2018, 118, 134-142.	3.6	22
33	Continuous proxy measurements reveal large mercury fluxes from glacial and forested watersheds in Alaska. Science of the Total Environment, 2017, 599-600, 145-155.	8.0	18
34	Monitoring volumetric fluctuations in tropical lakes and reservoirs using satellite remote sensing. Lake and Reservoir Management, 2018, 34, 154-166.	1.3	18
35	Hydrogen peroxide dynamics in an agricultural headwater stream: Evidence for significant nonphotochemical production. Limnology and Oceanography, 2013, 58, 2133-2144.	3.1	17
36	Energy and water balance response of a vegetated wetland to herbicide treatment of invasive Phragmites australis. Journal of Hydrology, 2016, 539, 290-303.	5.4	17

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37	Efficacy of a retention pond in treating stormwater nutrients and sediment. Journal of Cleaner Production, 2021, 290, 125787.	9.3	17
38	Water quality characterization of storm and irrigation runoff from a container nursery. Science of the Total Environment, 2019, 667, 166-178.	8.0	16
39	In-stream uptake and retention of C, N and P in a supraglacial stream. Annals of Glaciology, 2010, 51, 80-86.	1.4	13
40	Vertical surface waterâ€“groundwater exchange processes within a headwater floodplain induced by experimental floods. Hydrological Processes, 2016, 30, 3770-3787.	2.6	13
41	Chaoborus spp. Transport CH₄ from the Sediments to the Surface Waters of a Eutrophic Reservoir, But Their Contribution to Water Column CH₄ Concentrations and Diffusive Efflux Is Minor. Environmental Science & Technology, 2018, 52, 1165-1173.	10.0	13
42	Abundance and dimensions of naturally occurring macropores along stream channels and the effects of artificially constructed large macropores on transient storage. Freshwater Science, 2015, 34, 125-138.	1.8	12
43	Parameter uncertainty with flow variation of the one-dimensional solute transport model for small streams using Markov chain Monte Carlo. Journal of Hydrology, 2019, 575, 1145-1154.	5.4	12
44	A cost-effective image processing approach for analyzing the ecohydrology of river corridors. Limnology and Oceanography: Methods, 2016, 14, 359-369.	2.0	11
45	Low threshold for nitrogen concentration saturation in headwaters increases regional and coastal delivery. Environmental Research Letters, 2020, 15, 044018.	5.2	9
46	A spectrum of preferential flow alters solute mobility in soils. Scientific Reports, 2022, 12, 4261.	3.3	9
47	Salmonâ€derived nutrient and organic matter fluxes from a coastal catchment in southeast Alaska. Freshwater Biology, 2019, 64, 1157-1168.	2.4	7
48	Nitrate removal by watershed-scale hyporheic stream restoration: Modeling approach to estimate effects and patterns at the stream network scale. Ecological Engineering, 2022, 175, 106498.	3.6	6
49	What are the relevant sources and factors affecting event mean concentrations (EMCs) of nutrients and sediment in stormwater?. Science of the Total Environment, 2022, 828, 154368.	8.0	6
50	Storm effects on nitrogen flux and longitudinal variability in a riverâ€“reservoir system. River Research and Applications, 2019, 35, 577-586.	1.7	5
51	Estimating Facilityâ€Level Monthly Water Consumption of Commercial, Industrial, Municipal, and Thermoelectric Users in Virginia. Journal of the American Water Resources Association, 2022, 58, 1358-1376.	2.4	4
52	Nutrient Loss Following Phragmites australis Removal in Controlled Soil Mesocosms. Water, Air, and Soil Pollution, 2012, 223, 3333-3344.	2.4	3
53	elfgen: A New Instream Flow Framework for Rapid Generation and Optimization of Flowâ€“Ecology Relations. Journal of the American Water Resources Association, 2020, 56, 949-966.	2.4	3
54	Application of a New Speciesâ€Richness Based Flow Ecology Framework for Assessing Flow Reduction Effects on Aquatic Communities. Journal of the American Water Resources Association, 2020, 56, 967-980.	2.4	3

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55	Accounting for Temporal Variability of Streamflow in Estimates of Travel Time. Frontiers in Water, 2020, 2, .	2.3	1
56	Water Quality Characterization of Irrigation and Storm Runoff for a Nursery. Green Energy and Technology, 2019, , 788-793.	0.6	1
57	The Cumulative Role of Impoundments in Streamflow Alteration. Journal of the American Water Resources Association, 2022, 58, 119-133.	2.4	1