Roy Haggerty

List of Publications by Year
in descending order

52 papers	4,697 citations	117571 34 h-index	175177 52 g-index
54 all docs	54 docs citations	54 times ranked	3233 citing authors

#	Article	IF	Citations
1	What Matters Most: Are Future Stream Temperatures More Sensitive to Changing Air Temperatures, Discharge, or Riparian Vegetation?. Journal of the American Water Resources Association, 2019, 55, 116-132.	1.0	59
2	Measurement of gas-exchange rate in streams by the oxygenâ€“carbon method. Freshwater Science, 2018, 37, 222-237.	0.9	9
3	The Resazurinâ€Resorufin System: Insights From a Decade of â€œSmartâ€•Tracer Development for Hydrologic Applications. Water Resources Research, 2018, 54, 6877-6889.	1.7	38
4	The importance and challenge of hyporheic mixing. Water Resources Research, 2017, 53, 3565-3575.	1.7	77
5	Comprehensive multiyear carbon budget of a temperate headwater stream. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1306-1315.	1.3	40
6	Carbon dynamics in the hyporheic zone of a headwater mountain stream in the Cascade Mountains, Oregon. Water Resources Research, 2016, 52, 7556-7576.	1.7	26
7	The imprint of climate and geology on the residence times of groundwater. Geophysical Research Letters, 2016, 43, 701-708.	1.5	93
8	Nighttime and daytime respiration in a headwater stream. Ecohydrology, 2016, 9, 93-100.	1.1	21
9	A field comparison of multiple techniques to quantify groundwaterâ€“surface-water interactions. Freshwater Science, 2015, 34, 139-160.	0.9	77
10	Coupling multiscale observations to evaluate hyporheic nitrate removal at the reach scale. Freshwater Science, 2015, 34, 172-186.	0.9	36
11	Flow structure and mean residence times of lateral cavities in open channel flows: influence of bed roughness and shape. Environmental Fluid Mechanics, 2015, 15, 1069-1100.	0.7	22
12	Parameterization of Mean Residence Times in Idealized Rectangular Dead Zones Representative of Natural Streams. Journal of Hydraulic Engineering, 2014, 140, .	0.7	5
13	Effect of multiple lateral cavities on stream solute transport under non-Fickian conditions and at the Fickian asymptote. Journal of Hydrology, 2014, 519, 1707-1722.	2.3	6
14	Quantifying spatial differences in metabolism in headwater streams. Freshwater Science, 2014, 33, 798-811.	0.9	37
15	Ecosystem respiration increases with biofilm growth and bed forms: Flume measurements with resazurin. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 2220-2230.	1.3	27
16	Scaling and predicting solute transport processes in streams. Water Resources Research, 2013, 49, 4071-4088.	1.7	37
17	An efficient method to estimate processing rates in streams. Water Resources Research, 2013, 49, 6096-6099.	1.7	15
18	Increasing synchrony of high temperature and low flow in western North American streams: double trouble for coldwater biota?. Hydrobiologia, 2013, 712, 61-70.	1.0	87

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19	A mean residence time relationship for lateral cavities in gravel-bed rivers and streams: Incorporating streambed roughness and cavity shape. Water Resources Research, 2013, 49, 3642-3650.	1.7	31
20	Descriptors of natural thermal regimes in streams and their responsiveness to change in the Pacific Northwest of North America. Freshwater Biology, 2013, 58, 880-894.	1.2	84
21	Diurnal timing of warmer air under climate change affects magnitude, timing and duration of stream temperature change. Hydrological Processes, 2013, 27, 2367-2378.	1.1	16
22	Analytical solution and simplified analysis of coupled parentâ€daughter steadyâ€state transport with multirate mass transfer. Water Resources Research, 2013, 49, 635-639.	1.7	15
23	RANS Predictions of Turbulent Scalar Transport in Dead Zones of Natural Streams. , 2012, , .		5
24	Persistent Metal Contamination Limits Lotic Ecosystem Heterotrophic Metabolism after More Than 100 Years of Exposure: A Novel Application of the Resazurin Resorufin Smart Tracer. Environmental Science & Technology, 2012, 46, 9862-9871.	4.6	13
25	The paradox of cooling streams in a warming world: Regional climate trends do not parallel variable local trends in stream temperature in the Pacific continental United States. Geophysical Research Letters, 2012, 39, .	1.5	108
26	Measuring aerobic respiration in stream ecosystems using the resazurinâ€resorufin system. Journal of Geophysical Research, 2012, 117, .	3.3	79
27	Coupled transport and reaction kinetics control the nitrate sourceâ€sink function of hyporheic zones. Water Resources Research, 2012, 48, .	1.7	158
28	Defining and measuring the mean residence time of lateral surface transient storage zones in small streams. Water Resources Research, 2012, 48, .	1.7	41
29	Direct geoelectrical evidence of mass transfer at the laboratory scale. Water Resources Research, 2012, 48, .	1.7	34
30	Dynamics of nitrate production and removal as a function of residence time in the hyporheic zone. Journal of Geophysical Research, 2011, 116, .	3.3	370
31	Quantification of metabolically active transient storage (MATS) in two reaches with contrasting transient storage and ecosystem respiration. Journal of Geophysical Research, 2011, 116, .	3.3	61
32	Transient groundwater chemistry near a river: Effects on U(VI) transport in laboratory column experiments. Water Resources Research, 2011, 47, .	1.7	26
33	Influence of transient storage on stream nutrient uptake based on substrata manipulation. Aquatic Sciences, 2011, 73, 365-376.	0.6	35
34	Evaluation of alternative groundwater flow models for simulating hyporheic exchange in a small mountain stream. Journal of Hydrology, 2009, 364, 142-151.	2.3	76
35	Resazurin as a â€œsmartâ€•tracer for quantifying metabolically active transient storage in stream ecosystems. Journal of Geophysical Research, 2009, 114, .	3.3	89
36	Changes in hyporheic exchange flow following experimental wood removal in a small, lowâ€gradient stream. Water Resources Research, 2009, 45, .	1.7	45

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37	Residence time of bedform-driven hyporheic exchange. Advances in Water Resources, 2008, 31, 1382-1386.	1.7	121
38	Development of a â€œsmartâ€•tracer for the assessment of microbiological activity and sedimentâ€•water interaction in natural waters: The resazurinâ€•resorufin system. Water Resources Research, 2008, 44, .	1.7	91
39	A modelling study of hyporheic exchange pattern and the sequence, size, and spacing of stream bedforms in mountain stream networks, Oregon, USA. Hydrological Processes, 2006, 20, 2443-2457.	1.1	145
40	Determining in-channel (dead zone) transient storage by comparing solute transport in a bedrock channel-alluvial channel sequence, Oregon. Water Resources Research, 2005, 41, .	1.7	95
41	Experimental Visualization of Solute Transport and Mass Transfer Processes in Two-Dimensional Conductivity Fields with Connected Regions of High Conductivity. Environmental Science & Technology, 2004, 38, 3916-3926.	4.6	94
42	What controls the apparent timescale of solute mass transfer in aquifers and soils? A comparison of experimental results. Water Resources Research, 2004, 40, .	1.7	139
43	Comparing transient storage modeling and residence time distribution (RTD) analysis in geomorphically varied reaches in the Lookout Creek basin, Oregon, USA. Advances in Water Resources, 2003, 26, 925-937.	1.7	135
44	Power-law residence time distribution in the hyporheic zone of a 2nd-order mountain stream. Geophysical Research Letters, 2002, 29, 18-1.	1.5	248
45	Tracer tests in a fractured dolomite: 3. Double-porosity, multiple-rate mass transfer processes in convergent flow tracer tests. Water Resources Research, 2001, 37, 1143-1154.	1.7	79
46	Tracer tests in a fractured dolomite: 2. Analysis of mass transfer in single-well injection-withdrawal tests. Water Resources Research, 2001, 37, 1129-1142.	1.7	165
47	Modeling solute diffusion in the presence of pore-scale heterogeneity: method development and an application to the Culebra dolomite Member of the Rustler Formation, New Mexico, USA. Journal of Contaminant Hydrology, 2001, 48, 253-276.	1.6	20
48	On the late-time behavior of tracer test breakthrough curves. Water Resources Research, 2000, 36, 3467-3479.	1.7	401
49	Modeling Mass Transfer Processes in Soil Columns with Poreâ€•Scale Heterogeneity. Soil Science Society of America Journal, 1998, 62, 62-74.	1.2	89
50	Multipleâ€•Rate Mass Transfer for Modeling Diffusion and Surface Reactions in Media with Poreâ€•Scale Heterogeneity. Water Resources Research, 1995, 31, 2383-2400.	1.7	703
51	Design of multiple contaminant remediation: Sensitivity to rate-limited mass transfer. Water Resources Research, 1994, 30, 435-446.	1.7	55
52	Aquifer remediation: A method for estimating mass transfer rate coefficients and an evaluation of pulsed pumping. Water Resources Research, 1994, 30, 1979-1991.	1.7	79