

Brian L McGlynn

List of Publications by Year in descending order

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Version: 2024-02-01

98
papers

6,937
citations

66343

42
h-index

62596

80
g-index

103
all docs

103
docs citations

103
times ranked

6012
citing authors

#	ARTICLE	IF	CITATIONS
1	The Maimai <scp>M8</scp> experimental catchment database: Forty years of processâ€based research on steep, wet hillslopes. Hydrological Processes, 2021, 35, e14112.	2.6	4
2	Mountaintop mining legacies constrain ecological, hydrological and biogeochemical recovery trajectories. Environmental Research Letters, 2021, 16, 075004.	5.2	7
3	Soil Moisture Responses to Rainfall: Implications for Runoff Generation. Water Resources Research, 2021, 57, e2020WR028827.	4.2	38
4	Temporally Variable Stream Width and Surface Area Distributions in a Headwater Catchment. Water Resources Research, 2019, 55, 7166-7181.	4.2	17
5	From Points to Patterns: Using Groundwater Time Series Clustering to Investigate Subsurface Hydrological Connectivity and Runoff Source Area Dynamics. Water Resources Research, 2019, 55, 5784-5806.	4.2	34
6	Lateral, Vertical, and Longitudinal Source Area Connectivity Drive Runoff and Carbon Export Across Watershed Scales. Water Resources Research, 2018, 54, 1576-1598.	4.2	53
7	Hydrologic and biogeochemical drivers of dissolved organic carbon and nitrate uptake in a headwater stream network. Biogeochemistry, 2018, 138, 23-48.	3.5	19
8	Typecasting catchments: Classification, directionality, and the pursuit of universality. Advances in Water Resources, 2018, 112, 245-253.	3.8	8
9	Landscape analysis of soil methane flux across complex terrain. Biogeosciences, 2018, 15, 3143-3167.	3.3	22
10	The Relative Influence of Storm and Landscape Characteristics on Shallow Groundwater Responses in Forested Headwater Catchments. Water Resources Research, 2018, 54, 9883-9900.	4.2	13
11	Nested Scales of Spatial and Temporal Variability of Soil Water Content Across a Semiarid Montane Catchment. Water Resources Research, 2018, 54, 7960-7980.	4.2	20
12	Pyrite Oxidation Drives Exceptionally High Weathering Rates and Geologic CO₂ Release in Mountaintopâ€Mined Landscapes. Global Biogeochemical Cycles, 2018, 32, 1182-1194.	4.9	43
13	A software tool to assess uncertainty in transient-storage model parameters using Monte Carlo simulations. Freshwater Science, 2017, 36, 195-217.	1.8	27
14	Groundwater similarity across a watershed derived from timeâ€warped and flowâ€corrected time series. Water Resources Research, 2017, 53, 3921-3940.	4.2	26
15	Ephemeral and intermittent runoff generation processes in a low relief, highly weathered catchment. Water Resources Research, 2017, 53, 7055-7077.	4.2	74
16	Colimitation and the coupling of N and P uptake kinetics in oligotrophic mountain streams. Biogeochemistry, 2017, 132, 165-184.	3.5	14
17	Timeâ€lapse animation of hillslope groundwater dynamics details eventâ€based and seasonal bidirectional streamâ€groundwater gradients. Hydrological Processes, 2017, 31, 1983-1985.	2.6	5
18	Creating a More Perennial Problem? Mountaintop Removal Coal Mining Enhances and Sustains Saline Baseflows of Appalachian Watersheds. Environmental Science & Technology, 2017, 51, 8324-8334.	10.0	43

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19	Bidirectional streamâ€“groundwater flow in response to ephemeral and intermittent streamflow and groundwater seasonality. <i>Hydrological Processes</i> , 2017, 31, 3871-3880.	2.6	36
20	Complex terrain influences ecosystem carbon responses to temperature and precipitation. <i>Global Biogeochemical Cycles</i> , 2017, 31, 1306-1317.	4.9	15
21	A nurse-led multidisciplinary team approach in urology-oncology: Addressing the new cancer strategy. <i>Journal of Clinical Urology</i> , 2017, 10, 449-456.	0.1	3
22	Characterizing and reducing equifinality by constraining a distributed catchment model with regional signatures, local observations, and process understanding. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 3325-3352.	4.9	49
23	The impacts of mountain pine beetle disturbance on the energy balance of snow during the melt period. <i>Hydrological Processes</i> , 2016, 30, 588-602.	2.6	11
24	Downstream Dissipation of Storm Flow Heat Pulses: A Case Study and its Landscapeâ€“Level Implications. <i>Journal of the American Water Resources Association</i> , 2016, 52, 281-297.	2.4	26
25	Watershed structural influences on the distributions of stream network water and solute travel times under baseflow conditions. <i>Hydrological Processes</i> , 2016, 30, 2671-2685.	2.6	22
26	Diagnostic calibration and crossâ€“catchment transferability of a simple processâ€“consistent hydrologic model. <i>Hydrological Processes</i> , 2016, 30, 5027-5038.	2.6	9
27	Variability in isotopic composition of base flow in two headwater streams of the southern Appalachians. <i>Water Resources Research</i> , 2016, 52, 4264-4279.	4.2	19
28	Spatiotemporal processes that contribute to hydrologic exchange between hillslopes, valley bottoms, and streams. <i>Water Resources Research</i> , 2016, 52, 4628-4645.	4.2	35
29	The influence of an inâ€“network lake on the timing, form, and magnitude of downstream dissolved organic carbon and nutrient flux. <i>Water Resources Research</i> , 2016, 52, 8668-8684.	4.2	14
30	A Comparison of Methods Reveals that Enhanced Diffusion Helps Explain Cold-Season Soil CO2 Efflux in a Lodgepole Pine Ecosystem. <i>Cold Regions Science and Technology</i> , 2016, 121, 16-24.	3.5	10
31	Watershed memory at the <sc>C</sc>oweeta <sc>H</sc>ydrologic <sc>L</sc>aboratory: The effect of past precipitation and storage on hydrologic response. <i>Water Resources Research</i> , 2016, 52, 1673-1695.	4.2	54
32	Deep Impact: Effects of Mountaintop Mining on Surface Topography, Bedrock Structure, and Downstream Waters. <i>Environmental Science & Technology</i> , 2016, 50, 2064-2074.	10.0	82
33	The spatial and temporal evolution of contributing areas. <i>Water Resources Research</i> , 2015, 51, 4550-4573.	4.2	74
34	Water's Way at Sleepers River watershed â€“ revisiting flow generation in a postâ€“glacial landscape, Vermont USA. <i>Hydrological Processes</i> , 2015, 29, 3447-3459.	2.6	53
35	Modelâ€“based analysis of the influence of catchment properties on hydrologic partitioning across five mountain headwater subcatchments. <i>Water Resources Research</i> , 2015, 51, 4109-4136.	4.2	34
36	Variations in Streamflow Response to Large Hurricane-Season Storms in a Southeastern U.S. Watershed. <i>Journal of Hydrometeorology</i> , 2015, 16, 55-69.	1.9	32

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37	Land-atmosphere carbon and water flux relationships to vapor pressure deficit, soil moisture, and stream flow. Agricultural and Forest Meteorology, 2015, 208, 108-117.	4.8	28
38	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.	1.4	242
39	Landscape Position Influences Microbial Composition and Function via Redistribution of Soil Water across a Watershed. Applied and Environmental Microbiology, 2015, 81, 8457-8468.	3.1	22
40	Lateral inflows, stream-groundwater exchange, and network geometry influence stream water composition. Water Resources Research, 2014, 50, 4603-4623.	4.2	34
41	A service evaluation describing a nurse-led prostate cancer service in NHS, Ayrshire and Arran. International Journal of Urological Nursing, 2014, 8, 166-180.	0.2	11
42	ESTIMATING THERMAL REGIMES OF BULL TROUT AND ASSESSING THE POTENTIAL EFFECTS OF CLIMATE WARMING ON CRITICAL HABITATS. River Research and Applications, 2014, 30, 204-216.	1.7	68
43	A simple framework to estimate distributed soil temperature from discrete air temperature measurements in data-scarce regions. Journal of Geophysical Research D: Atmospheres, 2014, 119, 407-417.	3.3	31
44	Vegetation and topographic influences on the connectivity of shallow groundwater between hillslopes and streams. Ecohydrology, 2014, 7, 887-895.	2.4	46
45	Merging perspectives in the catchment sciences: the US-Japan Joint Seminar on catchment hydrology and forest biogeochemistry. Hydrological Processes, 2014, 28, 2878-2880.	2.6	1
46	Calibrating hydrologic models in flow-corrected time. Water Resources Research, 2014, 50, 748-753.	4.2	4
47	Ecohydrology of an outbreak: mountain pine beetle impacts trees in drier landscape positions first. Ecohydrology, 2013, 6, 444-454.	2.4	46
48	Variations in surface water-ground water interactions along a headwater mountain stream: Comparisons between transient storage and water balance analyses. Water Resources Research, 2013, 49, 3359-3374.	4.2	71
49	A Beta Regression Model for Improved Solar Radiation Predictions. Journal of Applied Meteorology and Climatology, 2013, 52, 1923-1938.	1.5	9
50	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
51	Nitrogen production from geochemical weathering of rocks in southwest Montana, USA. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 1068-1078.	3.0	15
52	Intrastream variability in solute transport: Hydrologic and geomorphic controls on solute retention. Journal of Geophysical Research F: Earth Surface, 2013, 118, 413-422.	2.8	19
53	A data acquisition framework for runoff prediction in ungauged basins. , 2013, , 29-52.		11
54	Using field data to inform and evaluate a new model of catchment hydrologic connectivity. Water Resources Research, 2013, 49, 6834-6846.	4.2	30

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55	Land use/land cover and scale influences on in-stream nitrogen uptake kinetics. Journal of Geophysical Research, 2012, 117, .	3.3	21
56	Exploring changes in the spatial distribution of stream baseflow generation during a seasonal recession. Water Resources Research, 2012, 48, .	4.2	73
57	Complex terrain leads to bidirectional responses of soil respiration to interannual water availability. Global Change Biology, 2012, 18, 749-756.	9.5	40
58	Hydrologic response to channel reconfiguration on Silver Bow Creek, Montana. Journal of Hydrology, 2012, 438-439, 125-136.	5.4	25
59	Active surveillance for prostate cancer: Scottish experience.. Journal of Clinical Oncology, 2012, 30, 167-167.	1.6	0
60	Quantifying watershed sensitivity to spatially variable N loading and the relative importance of watershed N retention mechanisms. Water Resources Research, 2011, 47, .	4.2	28
61	A watershed-scale assessment of a process soil CO ₂ production and efflux model. Water Resources Research, 2011, 47, .	4.2	26
62	Hierarchical controls on runoff generation: Topographically driven hydrologic connectivity, geology, and vegetation. Water Resources Research, 2011, 47, .	4.2	227
63	Stream-groundwater exchange and hydrologic turnover at the network scale. Water Resources Research, 2011, 47, .	4.2	58
64	Landscape structure and climate influences on hydrologic response. Water Resources Research, 2011, 47, .	4.2	76
65	On the spatial heterogeneity of net ecosystem productivity in complex landscapes. Ecosphere, 2011, 2, art86.	2.2	22
66	Landscape structure, groundwater dynamics, and soil water content influence soil respiration across riparian-hillslope transitions in the Tenderfoot Creek Experimental Forest, Montana. Hydrological Processes, 2011, 25, 811-827.	2.6	45
67	Terrain-based Predictive Modeling of Riparian Vegetation in a Northern Rocky Mountain Watershed. Wetlands, 2010, 30, 621-633.	1.5	17
68	Variable flushing mechanisms and landscape structure control stream DOC export during snowmelt in a set of nested catchments. Biogeochemistry, 2010, 99, 193-211.	3.5	80
69	An analysis of alternative conceptual models relating hyporheic exchange flow to diel fluctuations in discharge during baseflow recession. Hydrological Processes, 2010, 24, 686-694.	2.6	61
70	Tracer Additions for Spiraling Curve Characterization (TASCC): Quantifying stream nutrient uptake kinetics from ambient to saturation. Limnology and Oceanography: Methods, 2010, 8, 484-498.	2.0	99
71	Separating physical and biological nutrient retention and quantifying uptake kinetics from ambient to saturation in successive mountain stream reaches. Journal of Geophysical Research, 2010, 115, .	3.3	47
72	Hillslope hydrologic connectivity controls riparian groundwater turnover: Implications of catchment structure for riparian buffering and stream water sources. Water Resources Research, 2010, 46, .	4.2	165

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73	Spatial and temporal controls on watershed ecohydrology in the northern Rocky Mountains. <i>Water Resources Research</i> , 2010, 46, .	4.2	50
74	The future of hydrology: An evolving science for a changing world. <i>Water Resources Research</i> , 2010, 46, .	4.2	487
75	Calculating terrain indices along streams: A new method for separating stream sides. <i>Water Resources Research</i> , 2010, 46, .	4.2	22
76	Differential soil respiration responses to changing hydrologic regimes. <i>Water Resources Research</i> , 2009, 45, .	4.2	41
77	Landscape structure control on soil CO ₂ efflux variability in complex terrain: Scaling from point observations to watershed scale fluxes. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	83
78	Seasonality in spatial variability and influence of land use/land cover and watershed characteristics on stream water nitrate concentrations in a developing watershed in the Rocky Mountain West. <i>Water Resources Research</i> , 2009, 45, .	4.2	50
79	Hydrologic connectivity between landscapes and streams: Transferring reach- and plot-scale understanding to the catchment scale. <i>Water Resources Research</i> , 2009, 45, .	4.2	430
80	Channel water balance and exchange with subsurface flow along a mountain headwater stream in Montana, United States. <i>Water Resources Research</i> , 2009, 45, .	4.2	162
81	Variability in soil respiration across riparian-hillslope transitions. <i>Biogeochemistry</i> , 2008, 91, 51-70.	3.5	60
82	Identifying Linkages Between Land Use, Geomorphology, and Aquatic Habitat in a Mixed-Use Watershed. <i>Environmental Management</i> , 2008, 42, 867-876.	2.7	6
83	Interpretation and evaluation of combined measurement techniques for soil CO ₂ efflux: Discrete surface chambers and continuous soil CO ₂ concentration probes. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	54
84	A new triangular multiple flow direction algorithm for computing upslope areas from gridded digital elevation models. <i>Water Resources Research</i> , 2007, 43, .	4.2	275
85	Stream gains and losses across a mountain-to-valley transition: Impacts on watershed hydrology and stream water chemistry. <i>Water Resources Research</i> , 2007, 43, .	4.2	96
86	Diurnal hysteresis between soil CO ₂ and soil temperature is controlled by soil water content. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	137
87	Flow velocity and the hydrologic behavior of streams during baseflow. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	57
88	Taking the pulse of hydrology education. <i>Hydrological Processes</i> , 2007, 21, 1789-1792.	2.6	40
89	A stream tracer technique employing ionic tracers and specific conductance data applied to the Maimai catchment, New Zealand. <i>Hydrological Processes</i> , 2005, 19, 2491-2506.	2.6	42
90	The role of topography on catchment-scale water residence time. <i>Water Resources Research</i> , 2005, 41, .	4.2	571

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91	Scale effects on headwater catchment runoff timing, flow sources, and groundwater-streamflow relations. <i>Water Resources Research</i> , 2004, 40, .	4.2	176
92	The development and audit of a nurse-led urology/oncology clinic. <i>Nursing Times</i> , 2004, 100, 54-6.	0.2	0
93	On the relationships between catchment scale and streamwater mean residence time. <i>Hydrological Processes</i> , 2003, 17, 175-181.	2.6	144
94	Distributed assessment of contributing area and riparian buffering along stream networks. <i>Water Resources Research</i> , 2003, 39, .	4.2	147
95	Role of discrete landscape units in controlling catchment dissolved organic carbon dynamics. <i>Water Resources Research</i> , 2003, 39, .	4.2	229
96	Quantifying the relative contributions of riparian and hillslope zones to catchment runoff. <i>Water Resources Research</i> , 2003, 39, .	4.2	269
97	How does rainfall become runoff? A combined tracer and runoff transfer function approach. <i>Water Resources Research</i> , 2003, 39, .	4.2	191
98	A review of the evolving perceptual model of hillslope flowpaths at the Maimai catchments, New Zealand. <i>Journal of Hydrology</i> , 2002, 257, 1-26.	5.4	216