John C Schmidt

List of Publications by Year
in descending order

57 papers	3,866 citations	147801 31 h-index	161849 54 g-index
67 all docs	67 docs citations	67 times ranked	2709 citing authors

#	Article	IF	Citations
1	Metrics for assessing the downstream effects of dams. Water Resources Research, 2008, 44, .	4.2	286
2	Quantifying Macroinvertebrate Responses to In-Stream Habitat Restoration: Applications of Meta-Analysis to River Restoration. Restoration Ecology, 2010, 18, 8-19.	2.9	215
3	Science and Values in River Restoration in the Grand Canyon. BioScience, 1998, 48, 735-747.	4.9	185
4	Are largeâ€scale flow experiments informing the science and management of freshwater ecosystems?. Frontiers in Ecology and the Environment, 2014, 12, 176-185.	4.0	180
5	How dams can go with the flow. Science, 2016, 353, 1099-1100.	12.6	180
6	Functional Flows in Modified Riverscapes: Hydrographs, Habitats and Opportunities. BioScience, 2015, 65, 963-972.	4.9	177
7	Large-scale Flow Experiments for Managing River Systems. BioScience, 2011, 61, 948-959.	4.9	142
8	Recirculating Flow and Sedimentation in the Colorado River in Grand Canyon, Arizona. Journal of Geology, 1990, 98, 709-724.	1.4	132
9	The role of feedback mechanisms in historic channel changes of the lower Rio Grande in the Big Bend region. Geomorphology, 2011, 126, 333-349.	2.6	127
10	Streamflow regulation and multi-level flood plain formation: channel narrowing on the aggrading Green River in the eastern Uinta Mountains, Colorado and Utah. Geomorphology, 2002, 44, 337-360.	2.6	126
11	Channel narrowing by vertical accretion along the Green River near Green River, Utah. Bulletin of the Geological Society of America, 1999, 111, 1757-1772.	3.3	115
12	The rate and pattern of bed incision and bank adjustment on the Colorado River in Glen Canyon downstream from Glen Canyon Dam, 1956-2000. Bulletin of the Geological Society of America, 2007, 119, 556-575.	3.3	108
13	Equilibrium or indeterminate? Where sediment budgets fail: Sediment mass balance and adjustment of channel form, Green River downstream from Flaming Gorge Dam, Utah and Colorado. Geomorphology, 2005, 71, 156-181.	2.6	105
14	The geomorphic effectiveness of a large flood on the Rio Grande in the Big Bend region: Insights on geomorphic controls and post-flood geomorphic response. Geomorphology, 2013, 201, 183-198.	2.6	98
15	Complex channel responses to changes in stream flow and sediment supply on the lower Duchesne River, Utah. Geomorphology, 2005, 64, 185-206.	2.6	87
16	Application of wavelet analysis for monitoring the hydrologic effects of dam operation: Glen Canyon Dam and the Colorado River at Lees Ferry, Arizona. River Research and Applications, 2005, 21, 551-565.	1.7	77
17	THE 1996 CONTROLLED FLOOD IN GRAND CANYON: FLOW, SEDIMENT TRANSPORT, AND GEOMORPHIC CHANGE. , 2001, 11, 657-671.		70
18	Regulated streamflow, fine-grained deposits, and effective discharge in canyons with abundant debris fans. Geophysical Monograph Series, 1995, , 177-195.	0.1	69

#	Article	IF	Citations
19	Flume simulation of recirculating flow and sedimentation. Water Resources Research, 1993, 29, 2925-2939.	4.2	66
20	Mechanisms of vegetation-induced channel narrowing of an unregulated canyon river: Results from a natural field-scale experiment. Geomorphology, 2014, 211, 100-115.	2.6	66
21	Geologic versus wildfire controls on hillslope processes and debris flow initiation in the Green River canyons of Dinosaur National Monument. Geomorphology, 2006, 81, 114-127.	2.6	65
22	Effects of glen canyon dam on colorado river sand deposits used as campsites in grand canyon national park, USA. River Research and Applications, 1994, 9, 137-149.	0.8	64
23	Spatial and temporal patterns in channel change on the Snake River downstream from Jackson Lake dam, Wyoming. Geomorphology, 2013, 200, 132-142.	2.6	61
24	Recent sediment studies refute Glen Canyon Dam Hypothesis. Eos, 2002, 83, 273.	0.1	55
25	Riparian vegetation, Colorado River, and climate: Five decades of spatiotemporal dynamics in the Grand Canyon with river regulation. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1532-1547.	3.0	55
26	Changes in floodplain inundation under nonstationary hydrology for an adjustable, alluvial river channel. Water Resources Research, 2017, 53, 3811-3834.	4.2	55
27	Evaluation of in-channel gravel storage with morphology-based gravel budgets developed from planimetric data. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	54
28	Sediment supply versus local hydraulic controls on sediment transport and storage in a river with large sediment loads. Journal of Geophysical Research F: Earth Surface, 2016, 121, 82-110.	2.8	53
29	Linking morphodynamic response with sediment mass balance on the Colorado River in Marble Canyon: Issues of scale, geomorphic setting, and sampling design. Journal of Geophysical Research F: Earth Surface, 2013, 118, 361-381.	2.8	51
30	Estimating the Natural Flow Regime of Rivers With Longâ€Standing Development: The Northern Branch of the Rio Grande. Water Resources Research, 2018, 54, 1212-1236.	4.2	49
31	Stream geomorphology in a mountain lake district: hydraulic geometry, sediment sources and sinks, and downstream lake effects. Earth Surface Processes and Landforms, 2007, 32, 525-543.	2.5	41
32	Water storage decisions will determine the distribution and persistence of imperiled river fishes. Ecological Applications, 2021, 31, e02279.	3.8	38
33	Variability in eddy sandbar dynamics during two decades of controlled flooding of the Colorado River in the Grand Canyon. Sedimentary Geology, 2018, 363, 181-199.	2.1	36
34	COMPARISON OF THE MAGNITUDE OF EROSION ALONG TWO LARGE REGULATED RIVERS. Journal of the American Water Resources Association, 1995, 31, 617-631.	2.4	32
35	The influence of controlled floods on fine sediment storage in debris fan-affected canyons of the Colorado River basin. Geomorphology, 2014, 226, 65-75.	2.6	31
36	Downstream effects of impounding a natural lake: the Snake River downstream from Jackson Lake Dam, Wyoming, USA. Earth Surface Processes and Landforms, 2011, 36, 1421-1434.	2.5	27

#	Article	IF	Citations
37	Linkage between grain-size evolution and sediment depletion during Colorado River floods. Geophysical Monograph Series, 1999, , 71-98.	0.1	22
38	Summary and synthesis of geomorphic studies conducted during the 1996 controlled flood in Grand Canyon. Geophysical Monograph Series, 1999, , 329-341.	0.1	21
39	Debris-fan reworking during low-magnitude floods in the Green River canyons of the eastern Uinta Mountains, Colorado and Utah. Geology, 2004, 32, 309.	4.4	20
40	Longâ€Term Evolution of Sand Transport Through a River Network: Relative Influences of a Dam Versus Natural Changes in Grain Size From Sand Waves. Journal of Geophysical Research F: Earth Surface, 2018, 123, 1879-1909.	2.8	18
41	Topographic evolution of sand bars. Geophysical Monograph Series, 1999, , 117-130.	0.1	17
42	Post-project geomorphic assessment of a large process-based river restoration project. Geomorphology, 2016, 270, 145-158.	2.6	16
43	Incorporating social-ecological considerations into basin-wide responses to climate change in the Colorado River Basin. Current Opinion in Environmental Sustainability, 2019, 37, 14-19.	6.3	16
44	The roles of flood magnitude and duration in controlling channel width and complexity on the Green River in Canyonlands, Utah, USA. Geomorphology, 2020, 371, 107438.	2.6	16
45	Regulation of sand transport in the Colorado River by changes in the surface grain size of eddy sandbars over multi-year timescales. Sedimentology, 2005, 52, 1133-1153.	3.1	15
46	Channel narrowing by inset floodplain formation of the lower Green River in the Canyonlands region, Utah. Bulletin of the Geological Society of America, 2020, 132, 2333-2352.	3.3	15
47	Waves and Sandbar Erosion in the Grand Canyon: Applying Coastal Theory to a Fluvial System. Annals of the American Association of Geographers, 1993, 83, 475-497.	3.0	14
48	Water Temperature Controls for Regulated Canyonâ€Bound Rivers. Water Resources Research, 2020, 56, e2020WR027566.	4.2	13
49	When Models Meet Managers: Examples from Geomorphology. Geophysical Monograph Series, 0, , 27-40.	0.1	12
50	Water Storage Decisions and Consumptive Use May Constrain Ecosystem Management under Severe Sustained Drought. Journal of the American Water Resources Association, 2022, 58, 654-672.	2.4	12
51	Does Channel Narrowing by Floodplain Growth Necessarily Indicate Sediment Surplus? Lessons From Sediment Transport Analyses in the Green and Colorado Rivers, Canyonlands, Utah. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2019JF005414.	2.8	10
52	Variation in the magnitude and style of deposition and erosion in three long (8â€“12 km) reaches as determined by photographic analysis. Geophysical Monograph Series, 1999, , 185-203.	0.1	8
53	A Map Overlay Error Model Based on Boundary Geometry. Geographical Analysis, 2005, 37, 350-369.	3.5	8
54	Measuring channel planform change from image time series: A generalizable, spatially distributed, probabilistic method for quantifying uncertainty. Earth Surface Processes and Landforms, 2020, 45, 2727-2744.	2.5	8

#	Article	IF	Citations
55	Causes of Variability in Suspendedâ€Sand Concentration Evaluated Using Measurements in the Colorado River in Grand Canyon. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2019JF005226.	2.8	7
56	Using a historical aerial photograph analysis to inform trout habitat restoration efforts. Earth Surface Processes and Landforms, 2011, 36, 1693-1702.	2.5	5
57	Effects of Dams on Rivers. , 2022, , 503-515.		1