David A Sear

List of Publications by Year
in descending order

101 papers	7,405 citations	87401 40 h-index	68831 81 g-index
109 all docs	109 docs citations	109 times ranked	6925 citing authors

#	Article	IF	Citations
1	Evidence for a mid-Holocene drowning from the Atacama Desert coast of Chile. Journal of Archaeological Science, 2022, 140, 105565.	1.2	1
2	Contrasting Common Era climate and hydrology sensitivities from paired lake sediment dinosterol hydrogen isotope records in the South Pacific Convergence Zone. Quaternary Science Reviews, 2022, 281, 107421.	1.4	4
3	Untangling the controls on bedload transport in a woodâ€loaded river with RFID tracers and linear mixed modelling. Earth Surface Processes and Landforms, 2022, 47, 2283-2298.	1.2	2
4	Climate and human exploitation have regulated Atlantic salmon populations in the River Spey, Scotland, over the last 2000 years. Holocene, 2022, 32, 780-793.	0.9	2
5	Leaf Wax Hydrogen Isotopes as a Hydroclimate Proxy in the Tropical Pacific. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005891.	1.3	16
6	Sediment and Nutrient Retention in Ponds on an Agricultural Stream: Evaluating Effectiveness for Diffuse Pollution Mitigation. Water (Switzerland), 2021, 13, 1640.	1.2	10
7	Exploring the Capability of Natural Flood Management Approaches in Groundwater-Dominated Chalk Streams. Water (Switzerland), 2021, 13, 2212.	1.2	4
8	The scope for a system-based approach to determine fine sediment targets for chalk streams. Catena, 2021, 206, 105541.	2.2	7
9	Human occupation and ecosystem change on Upolu (Samoa) during the Holocene. Journal of Biogeography, 2020, 47, 600-614.	1.4	18
10	Mean flow and turbulence structure over exposed roots on a forested floodplain: Insights from a controlled laboratory experiment. PLoS ONE, 2020, 15, e0229306.	1.1	3
11	Human settlement of East Polynesia earlier, incremental, and coincident with prolonged South Pacific drought. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8813-8819.	3.3	54
12	X-ray computed tomography reveals that grain protrusion controls critical shear stress for entrainment of fluvial gravels. Geology, 2020, 48, 149-153.	2.0	15
13	Development of a vectorâ€based 3D grain entrainment model with application to Xâ€ray computed tomography scanned riverbed sediment. Earth Surface Processes and Landforms, 2019, 44, 3057-3077.	1.2	7
14	Using lake sediment archives to improve understanding of flood magnitude and frequency: Recent extreme flooding in northwest UK. Earth Surface Processes and Landforms, 2019, 44, 2366-2376.	1.2	22
15	Does variation in egg structure among five populations of Atlantic salmon (Salmo salar) influence their survival in low oxygen conditions?. Royal Society Open Science, 2019, 6, 181020.	1.1	4
16	Reconstructing precipitation in the tropical South Pacific from dinosterol 2H/1H ratios in lake sediment. Geochimica Et Cosmochimica Acta, 2019, 245, 190-206.	1.6	14
17	A conceptual model of riparian forest restoration for natural flood management. Water and Environment Journal, 2019, 33, 329-341.	1.0	16
18	Natural vs anthropogenic streams in Europe: History, ecology and implications for restoration, river-rewilding and riverine ecosystem services. Earth-Science Reviews, 2018, 180, 185-205.	4.0	172

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19	Small Water Bodies in Great Britain and Ireland: Ecosystem function, human-generated degradation, and options for restorative action. Science of the Total Environment, 2018, 645, 1598-1616.	3.9	87
20	A restatement of the natural science evidence concerning catchment-based â€˜naturalâ€™ flood management in the UK. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160706.	1.0	184
21	The magnitude and significance of sediment oxygen demand in gravel spawning beds for the incubation of salmonid embryos. River Research and Applications, 2017, 33, 1642-1654.	0.7	16
22	Can macroinvertebrate biological traits indicate fineâ€grained sediment conditions in streams?. River Research and Applications, 2017, 33, 1606-1617.	0.7	34
23	Sedimentâ€associated organic matter sources and sediment oxygen demand in a Special Area of Conservation (SAC): A case study of the River Axe, UK. River Research and Applications, 2017, 33, 1539-1552.	0.7	11
24	Interannual variability in the effects of physical habitat and parentage on Chinook salmon egg-to-fry survival. Canadian Journal of Fisheries and Aquatic Sciences, 2016, 73, 1047-1059.	0.7	11
25	The effects of oxygen depletion due to upwelling groundwater on the posthatch fitness of Atlantic salmon (Salmo salar). Canadian Journal of Fisheries and Aquatic Sciences, 2016, 73, 1830-1840.	0.7	10
26	The effects of river restoration on catchment scale flood risk and flood hydrology. Earth Surface Processes and Landforms, 2016, 41, 997-1008.	1.2	130
27	Understanding the controls on deposited fine sediment in the streams of agricultural catchments. Science of the Total Environment, 2016, 547, 366-381.	3.9	83
28	Mapping habitat indices across river networks using spatial statistical modelling of River Habitat Survey data. Ecological Indicators, 2016, 66, 20-29.	2.6	22
29	Does fine sediment source as well as quantity affect salmonid embryo mortality and development?. Science of the Total Environment, 2016, 541, 957-968.	3.9	44
30	Sensitivity of a hydraulic model to channel erosion uncertainty during extreme flooding. Hydrological Processes, 2015, 29, 261-279.	1.1	26
31	Development of a biotic index using stream macroinvertebrates to assess stress from deposited fine sediment. Freshwater Biology, 2015, 60, 2019-2036.	1.2	53
32	Assessment of a rapid method for quantitative reach-scale estimates of deposited fine sediment in rivers. Geomorphology, 2015, 230, 37-50.	1.1	47
33	The influence of geomorphology on large wood dynamics in a low gradient headwater stream. Water Resources Research, 2014, 50, 9194-9210.	1.7	59
34	Sources of sediment-bound organic matter infiltrating spawning gravels during the incubation and emergence life stages of salmonids. Agriculture, Ecosystems and Environment, 2014, 196, 76-93.	2.5	37
35	Estimating the contribution of in-stream cattle faeces deposits to nutrient loading in an English Chalk stream. Agricultural Water Management, 2014, 131, 156-162.	2.4	13
36	Interactions between diatoms and fine sediment. Hydrological Processes, 2014, 28, 1226-1237.	1.1	73

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37	Factors controlling the temporal variability in dissolved oxygen regime of salmon spawning gravels. Hydrological Processes, 2014, 28, 86-103.	1.1	31
38	Spatial variations in surface sediment structure in riffleâ€“pool sequences: a preliminary test of the Differential Sediment Entrainment Hypothesis (DSEH). Earth Surface Processes and Landforms, 2013, 38, 449-465.	1.2	76
39	Catchment source contributions to the sediment-bound organic matter degrading salmonid spawning gravels in a lowland river, southern England. Science of the Total Environment, 2013, 456-457, 181-195.	3.9	49
40	Morphodynamic signatures of braiding mechanisms as expressed through change in sediment storage in a gravelâ€bed river. Journal of Geophysical Research F: Earth Surface, 2013, 118, 759-779.	1.0	146
41	THE RELATIONSHIP BETWEEN FINE SEDIMENT AND MACROPHYTES IN RIVERS. River Research and Applications, 2012, 28, 1006-1018.	0.7	148
42	THE IMPACT OF FINE SEDIMENT ON MACROâ€INVERTEBRATES. River Research and Applications, 2012, 28, 1055-1071.	0.7	346
43	Cartographic, Geophysical and Diver Surveys of the Medieval Town Site at Dunwich, Suffolk, England. International Journal of Nautical Archaeology, 2011, 40, 113-132.	0.1	23
44	The potential for paleolimnology to determine historic sediment delivery to rivers. Journal of Paleolimnology, 2011, 45, 287-306.	0.8	61
45	The impacts of fine sediment on riverine fish. Hydrological Processes, 2011, 25, 1800-1821.	1.1	433
46	Sediment targets for informing river catchment management: international experience and prospects. Hydrological Processes, 2011, 25, 2112-2129.	1.1	113
47	Accounting for uncertainty in DEMs from repeat topographic surveys: improved sediment budgets. Earth Surface Processes and Landforms, 2010, 35, 136-156.	1.2	474
48	Linking geomorphic changes to salmonid habitat at a scale relevant to fish. River Research and Applications, 2010, 26, 469-486.	0.7	101
49	Process-based Principles for Restoring River Ecosystems. BioScience, 2010, 60, 209-222.	2.2	575
50	Logjam controls on channel:floodplain interactions in wooded catchments and their role in the formation of multi-channel patterns. Geomorphology, 2010, 116, 305-319.	1.1	125
51	A method for applying fluvial geomorphology in support of catchmentâ€scale river restoration planning. Aquatic Conservation: Marine and Freshwater Ecosystems, 2009, 19, 506-519.	0.9	71
52	Integrating ecology with hydromorphology: a priority for river science and management. Aquatic Conservation: Marine and Freshwater Ecosystems, 2009, 19, 113-125.	0.9	271
53	28 Uncertain restoration of gravel-bed rivers and the role of geomorphology. Developments in Earth Surface Processes, 2007, 11, 739-760.	2.8	4
54	A review of factors influencing the availability of dissolved oxygen to incubating salmonid embryos. Hydrological Processes, 2007, 21, 323-334.	1.1	134

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55	A field-based assessment of oxygen supply to incubating Atlantic salmon (Salmo salar) embryos. Hydrological Processes, 2007, 21, 3087-3100.	1.1	34
56	Impacts of river restoration on smallâ€wood dynamics in a lowâ€gradient headwater stream. Earth Surface Processes and Landforms, 2007, 32, 1204-1218.	1.2	43
57	The application of palaeohydrology in river management. Catena, 2006, 66, 169-183.	2.2	38
58	Does scientific conjecture accurately describe restoration practice? Insight from an international river restoration survey. Area, 2006, 38, 128-142.	1.0	31
59	Impact of clay particles on the cutaneous exchange of oxygen across the chorion of Atlantic salmon eggs. Journal of Fish Biology, 2005, 66, 1681-1691.	0.7	58
60	The impact of fine sediment accumulation on the survival of incubating salmon progeny: Implications for sediment management. Science of the Total Environment, 2005, 344, 241-258.	3.9	216
61	Refinement and application of a conductiometric standpipe technique for measuring interstitial flow velocity in salmonid spawning gravels. Hydrobiologia, 2005, 545, 249-256.	1.0	8
62	Integrating Geomorphological Tools in Ecological and Management Studies. , 2005, , 631-660.		3
63	The hydraulic impact and performance of a lowland rehabilitation scheme based on pool-riffle installation: the River Waveney, Scole, Suffolk, UK. River Research and Applications, 2004, 20, 847-863.	0.7	26
64	Comparative biodiversity of rivers, streams, ditches and ponds in an agricultural landscape in Southern England. Biological Conservation, 2004, 115, 329-341.	1.9	692
65	Environmental change in river channels: a neglected element. Towards geomorphological typologies, standards and monitoring. Science of the Total Environment, 2003, 310, 17-23.	3.9	55
66	Exploring the Relations Between Riverbank Erosion and Geomorphological Controls Using Geographically Weighted Logistic Regression. Geographical Analysis, 2003, 35, 58-82.	1.9	45
67	The influence of vegetation and organic debris on flood-plain sediment dynamics: case study of a low-order stream in the New Forest, England. Geomorphology, 2003, 51, 61-80.	1.1	151
68	Modelling three-dimensional flow structures and patterns of boundary shear stress in a natural pool-riffle sequence. Earth Surface Processes and Landforms, 2001, 26, 553-576.	1.2	174
69	A load cell based continuous recording bedload trap. Earth Surface Processes and Landforms, 2000, 25, 659-672.	1.2	28
70	Surface modelling of upland river channel topography and sedimentology using GIS. Physics and Chemistry of the Earth, 2000, 25, 399-406.	0.3	8
71	Groundwater dominated rivers. Hydrological Processes, 1999, 13, 255-276.	1.1	160
72	Sediment transport and siltation of brown trout (Salmo trutta L.) spawning gravels in chalk streams. Hydrological Processes, 1999, 13, 447-458.	1.1	119

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73	Groundwater dominated rivers. Special issue. Hydrological Processes, 1999, 13, iv.	1.1	0
74	Groundwater dominated rivers. , 1999, 13, 255.		1
75	Sediment transport and siltation of brown trout (Salmo trutta L.) spawning gravels in chalk streams. , 1999, 13, 447.		2
76	Sediment transport and siltation of brown trout (Salmo trutta L.) spawning gravels in chalk streams. , 1999, 13, 447.		2
77	A preliminary analysis of the morphological adjustment within and downstream of a lowland river subject to river restoration. Aquatic Conservation: Marine and Freshwater Ecosystems, 1998, 8, 167-183.	0.9	31
78	The geomorphological basis for classifying rivers. Aquatic Conservation: Marine and Freshwater Ecosystems, 1998, 8, 415-430.	0.9	68
79	A preliminary analysis of the morphological adjustment within and downstream of a lowland river subject to river restoration. , 1998, 8, 167.		1
80	SEDIMENT TRANSPORT PROCESSES IN POOLâ€“RIFFLE SEQUENCES. Earth Surface Processes and Landforms, 1996, 21, 241-262.	1.2	190
81	Sediment-related river maintenance: The role of fluvial geomorphology. Earth Surface Processes and Landforms, 1995, 20, 629-647.	1.2	123
82	Morphological and sedimentological changes in a gravel-bed river following 12 years of flow regulation for hydropower. River Research and Applications, 1995, 10, 247-264.	1.2	56
83	Evaluating field-based GIS for environmental characterization, modelling and decision support. International Journal of Geographical Information Science, 1995, 9, 475-486.	2.2	24
84	Geomorphological approach to stream stabilization and restoration: Case study of the Mimmshall brook, hertfordshire, UK. River Research and Applications, 1994, 9, 205-223.	1.2	13
85	Gps, gis and geomorphological field work. Earth Surface Processes and Landforms, 1994, 19, 777-787.	1.2	19
86	River restoration and geomorphology. Aquatic Conservation: Marine and Freshwater Ecosystems, 1994, 4, 169-177.	0.9	168
87	Fine sediment infiltration into gravel spawning beds within a regulated river experiencing floods: Ecological implications for salmonids. River Research and Applications, 1993, 8, 373-390.	1.2	107
88	Uncertainty in River Restoration. , 0, , 1-13.		2
89	Measures of Success: Uncertainty and Defining the Outcomes of River Restoration Schemes. , 0, , 187-208.		6
90	Uncertainty and the Management of Restoration Projects: The Construction and Early Post-Construction Phases. , 0, , 229-250.		2

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91	The Sustainability of Restored Rivers: Catchment-Scale Perspectives on Long Term Response. , 0, , 251-286.		8
92	Uncertainty and the Sustainable Management of Restored Rivers. , 0, , 287-301.		5
93	Sources of Uncertainty in River Restoration Research. , 0, , 15-19.		26
94	The Scope of Uncertainties in River Restoration. , 0, , 21-39.		48
95	Planning River Restoration Projects: Social and Cultural Dimensions. , 0, , 41-60.		26
96	Uncertainty in Riparian and Floodplain Restoration. , 0, , 79-104.		5
97	Hydrological and Hydraulic Aspects of Restoration Uncertainty for Ecological Purposes. , 0, , 105-138.		3
98	Uncertainty Surrounding the Ecological Targets and Response of River and Stream Restoration. , 0, , 139-163.		1
99	Constructing Restoration Schemes: Uncertainty, Challenges and Opportunities. , 0, , 165-186.		0
100	Spatial variations in surface sediment structure in riffleâ€“pool sequences: a preliminary test of the Differential Sediment Entrainment Hypothesis (DSEH). , 0, .		1
101	Interactions between fine-grained sediment delivery, river bed deposition and salmonid spawning success. Proceedings of the International Association of Hydrological Sciences, 0, 367, 199-206.	1.0	2