Kirstie A Fryirs

List of Publications by Year
in descending order

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Version: 2024-02-01

134 papers	6,061 citations	81900 39 h-index	79698 73 g-index
158 all docs	158 docs citations	158 times ranked	3532 citing authors

#	Article	IF	Citations
1	(Dis)Connectivity in catchment sediment cascades: a fresh look at the sediment delivery problem. Earth Surface Processes and Landforms, 2013, 38, 30-46.	2.5	504
2	Buffers, barriers and blankets: The (dis)connectivity of catchment-scale sediment cascades. Catena, 2007, 70, 49-67.	5.0	466
3	Landscape connectivity: the geographic basis of geomorphic applications. Area, 2006, 38, 165-174.	1.6	277
4	Connectivity as an emergent property of geomorphic systems. Earth Surface Processes and Landforms, 2019, 44, 4-26.	2.5	233
5	Variability in sediment delivery and storage along river courses in Bega catchment, NSW, Australia: implications for geomorphic river recovery. Geomorphology, 2001, 38, 237-265.	2.6	207
6	Catchment-scale (dis)connectivity in sediment flux in the upper Hunter catchment, New South Wales, Australia. Geomorphology, 2007, 84, 297-316.	2.6	173
7	River sensitivity: a lost foundation concept in fluvial geomorphology. Earth Surface Processes and Landforms, 2017, 42, 55-70.	2.5	173
8	River Styles, a Geomorphic Approach to Catchment Characterization: Implications for River Rehabilitation in Bega Catchment, New South Wales, Australia. Environmental Management, 2000, 25, 661-679.	2.7	164
9	Geomorphic mapping and taxonomy of fluvial landforms. Geomorphology, 2015, 248, 273-295.	2.6	151
10	Donâ€™t Fight the Site: Three Geomorphic Considerations in Catchment-Scale River Rehabilitation Planning. Environmental Management, 2009, 43, 1201-1218.	2.7	140
11	Reading the landscape. Progress in Physical Geography, 2013, 37, 601-621.	3.2	131
12	An approach for measuring confinement and assessing the influence of valley setting on river forms and processes. Earth Surface Processes and Landforms, 2016, 41, 701-710.	2.5	111
13	The Use of Evolutionary Trajectories to Guide â€˜Moving Targetsâ€™ in the Management of River Futures. River Research and Applications, 2016, 32, 823-835.	1.7	108
14	Use of ergodic reasoning to reconstruct the historical range of variability and evolutionary trajectory of rivers. Earth Surface Processes and Landforms, 2012, 37, 763-773.	2.5	100
15	A GEOMORPHIC APPROACH TO THE IDENTIFICATION OF RIVER RECOVERY POTENTIAL. Physical Geography, 2000, 21, 244-277.	1.4	87
16	Slopeâ€“channel decoupling in Wolumla catchment, New South Wales, Australia: the changing nature of sediment sources following European settlement. Catena, 1999, 35, 41-63.	5.0	79
17	Comparative assessment of three approaches for deriving stream power plots along long profiles in the upper Hunter River catchment, New South Wales, Australia. Geomorphology, 2006, 74, 297-317.	2.6	78
18	Naturalness and Place in River Rehabilitation. Ecology and Society, 2009, 14, .	2.3	78

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19	Post-European changes to the fluvial geomorphology of Bega catchment, Australia: implications for river ecology. Freshwater Biology, 1999, 41, 839-848.	2.4	77
20	The Blurred Line between Form and Process: A Comparison of Stream Channel Classification Frameworks. PLoS ONE, 2016, 11, e0150293.	2.5	75
21	The character and age structure of valley fills in upper Wolumla Creek catchment, south coast, New South Wales, Australia. , 1998, 23, 271-287.		71
22	Linking geomorphic character, behaviour and condition to fluvial biodiversity: implications for river management. Aquatic Conservation: Marine and Freshwater Ecosystems, 2006, 16, 267-288.	2.0	71
23	Antecedent controls on river character and behaviour in partly confined valley settings: Upper Hunter catchment, NSW, Australia. Geomorphology, 2010, 117, 106-120.	2.6	71
24	Assessing the geomorphic recovery potential of rivers: forecasting future trajectories of adjustment for use in management. Wiley Interdisciplinary Reviews: Water, 2016, 3, 727-748.	6.5	71
25	Morphological and historical resilience to catastrophic flooding: The case of Lockyer Creek, SE Queensland, Australia. Geomorphology, 2015, 241, 55-71.	2.6	67
26	Geomorphic effectiveness: a linear concept in a nonâ€linear world. Earth Surface Processes and Landforms, 2018, 43, 4-20.	2.5	66
27	Did humid-temperate rivers in the Old and New Worlds respond differently to clearance of riparian vegetation and removal of woody debris?. Progress in Physical Geography, 2005, 29, 27-49.	3.2	64
28	Seed banks as a source of vegetation regeneration to support the recovery of degraded rivers: A comparison of river reaches of varying condition. Science of the Total Environment, 2016, 542, 591-602.	8.0	60
29	Whatâ€™s in a name? A naming convention for geomorphic river types using the River Styles Framework. PLoS ONE, 2018, 13, e0201909.	2.5	60
30	Tributaryâ€“trunk stream relations in a cut-and-fill landscape: a case study from Wolumla catchment, New South Wales, Australia. Geomorphology, 1999, 28, 61-73.	2.6	58
31	Developing and using geomorphic condition assessments for river rehabilitation planning, implementation and monitoring. Wiley Interdisciplinary Reviews: Water, 2015, 2, 649-667.	6.5	57
32	A fluvial sediment budget for upper Wolumla Creek, south coast, New South Wales, Australia. Australian Geographer, 1998, 29, 107-124.	1.7	56
33	What are we monitoring and why? Using geomorphic principles to frame eco-hydrological assessments of river condition. Science of the Total Environment, 2010, 408, 2025-2033.	8.0	55
34	Channelâ€“floodplain connectivity during an extreme flood event: implications for sediment erosion, deposition, and delivery. Earth Surface Processes and Landforms, 2013, 38, 1444-1456.	2.5	55
35	Spatial variability in the timing, nature and extent of channel response to typical human disturbance along the Upper Hunter River, New South Wales, Australia. Earth Surface Processes and Landforms, 2008, 33, 868-889.	2.5	53
36	Managing sediment (dis)connectivity in fluvial systems. Science of the Total Environment, 2020, 736, 139627.	8.0	53

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37	Has river rehabilitation begun? Social perspectives from the Upper Hunter catchment, New South Wales, Australia. Geoforum, 2010, 41, 399-409.	2.5	52
38	Catchmentâ€•and reachâ€scale controls on the distribution and expectation of geomorphic channel adjustment. Water Resources Research, 2016, 52, 3408-3427.	4.2	43
39	Tracking geomorphic recovery in processâ€based river management. Land Degradation and Development, 2018, 29, 3221-3244.	3.9	43
40	Guiding principles for assessing geomorphic river condition: application of a framework in the Bega catchment, South Coast, New South Wales, Australia. Catena, 2003, 53, 17-52.	5.0	42
41	Palaeohydrology of lowland rivers in the Murray-Darling Basin, Australia. Quaternary Science Reviews, 2018, 200, 85-105.	3.0	41
42	Geomorphology in action: Linking policy with on-the-ground actions through applications of the River Styles framework. Applied Geography, 2011, 31, 1132-1143.	3.7	39
43	To plugâ€in or not to plugâ€in? Geomorphic analysis of rivers using the River Styles Framework in an era of big data acquisition and automation. Wiley Interdisciplinary Reviews: Water, 2019, 6, e1372.	6.5	39
44	Prioritising the placement of riparian vegetation to reduce flood risk and end-of-catchment sediment yields: Important considerations in hydrologically-variable regions. Journal of Environmental Management, 2017, 190, 9-19.	7.8	38
45	Postâ€European settlement response gradients of river sensitivity and recovery across the upper Hunter catchment, Australia. Earth Surface Processes and Landforms, 2009, 34, 897-918.	2.5	37
46	Mapping valley bottom confinement at the network scale. Earth Surface Processes and Landforms, 2019, 44, 1828-1845.	2.5	37
47	Peatlands in eastern Australia? Sedimentology and age structure of Temperate Highland Peat Swamps on Sandstone (THPSS) in the Southern Highlands and Blue Mountains of NSW, Australia. Holocene, 2014, 24, 1527-1538.	1.7	34
48	Inside the “Black Box” of River Restoration: Using Catchment History to Identify Disturbance and Response Mechanisms to Set Targets for Process-Based Restoration. Ecology and Society, 2010, 15, .	2.3	32
49	How seed traits predict floating times: a biophysical process model for hydrochorous seed transport behaviour in fluvial systems. Freshwater Biology, 2016, 61, 19-31.	2.4	32
50	The relationship between geomorphic river adjustment and management actions over the last 50 years in the Upper Hunter Catchment, NSW, Australia. River Research and Applications, 2009, 25, 904-928.	1.7	30
51	Hydrological conditions explain variation in wood density in riparian plants of southâ€eastern Australia. Journal of Ecology, 2015, 103, 945-956.	4.0	30
52	Digging deep for diversity: riparian seed bank abundance and species richness in relation to burial depth. Freshwater Biology, 2014, 59, 100-113.	2.4	29
53	Heterogeneous flows foster heterogeneous assemblages: relationships between functional diversity and hydrological heterogeneity in riparian plant communities. Freshwater Biology, 2015, 60, 2208-2225.	2.4	29
54	Progress, problems and prospects in Australian river repair. Marine and Freshwater Research, 2013, 64, 642.	1.3	27

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55	Sedimentologically significant tributaries: catchmentâ€scale controls on sediment (dis)connectivity in the Lockyer Valley, SEQ, Australia. Earth Surface Processes and Landforms, 2017, 42, 1493-1504.	2.5	27
56	River sensitivity and sediment connectivity as tools for assessing future geomorphic channel behavior. International Journal of River Basin Management, 2020, 18, 279-293.	2.7	26
57	Identifying threshold responses of Australian dryland rivers to future hydroclimatic change. Scientific Reports, 2020, 10, 6653.	3.3	26
58	Identifying key sedimentary indicators of geomorphic structure and function of upland swamps in the Blue Mountains for use in condition assessment and monitoring. Catena, 2016, 147, 564-577.	5.0	25
59	â€˜Out with the Old?â€™ Why coarse spatial datasets are still useful for catchmentâ€scale investigations of sediment (dis)connectivity. Earth Surface Processes and Landforms, 2017, 42, 1588-1596.	2.5	25
60	The importance of relational values in river management: understanding enablers and barriers for effective participation. Ecology and Society, 2020, 25, .	2.3	25
61	Things we can do now that we could not do before: Developing and using a cross-scalar, state-wide database to support geomorphologically-informed river management. PLoS ONE, 2021, 16, e0244719.	2.5	25
62	Antecedent landscape controls on river character, behaviour and evolution at the base of the escarpment in Bega catchment, South Coast, New South Wales, Australia. Zeitschrift FÃ¼r Geomorphologie, 2002, 46, 475-504.	0.8	24
63	Assemblages of geomorphic units: A building block approach to analysis and interpretation of river character, behaviour, condition and recovery. Earth Surface Processes and Landforms, 2022, 47, 92-108.	2.5	24
64	Intrinsic and extrinsic controls on the geomorphic condition of upland swamps in Eastern NSW. Catena, 2016, 137, 100-112.	5.0	23
65	Practicing Sociogeomorphology: Relationships and Dialog in River Research and Management. Society and Natural Resources, 2018, 31, 106-120.	1.9	23
66	Sediment tracing in the upper Hunter catchment using elemental and mineralogical compositions: Implications for catchment-scale suspended sediment (dis)connectivity and management. Geomorphology, 2013, 193, 112-121.	2.6	22
67	The geomorphic character and hydrological function of an upland swamp, Budderoo plateau, southern highlands, NSW, Australia. Physical Geography, 2014, 35, 313-334.	1.4	22
68	Quantifying fluvial (dis)connectivity in an agricultural catchment using a geomorphic approach and sediment source tracing. Journal of Soils and Sediments, 2015, 15, 2052-2066.	3.0	22
69	How far have management practices come in â€˜working with the riverâ€™?. Earth Surface Processes and Landforms, 2021, 46, 3004-3010.	2.5	22
70	Post-rehabilitation environmental hazard of Cu, Zn, As and Pb at the derelict Conrad Mine, eastern Australia. Environmental Pollution, 2007, 148, 491-500.	7.5	21
71	Defining the floodplain in hydrologicallyâ€variable settings: implications for flood risk management. Earth Surface Processes and Landforms, 2016, 41, 2153-2164.	2.5	21
72	Contextualising the trajectory of geomorphic river recovery with environmental history to support river management. Applied Geography, 2018, 94, 130-146.	3.7	21

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73	Truths of the Riverscape: Moving beyond command-and-control to geomorphologically informed nature-based river management. Geoscience Letters, 2022, 9, .	3.3	21
74	Knowing Your Place: an Australasian perspective on catchment-framed approaches to river repair. Australian Geographer, 2006, 37, 131-145.	1.7	20
75	A geomorphic assessment to inform strategic stream restoration planning in the Middle Fork John Day Watershed, Oregon, USA. Journal of Maps, 2017, 13, 369-381.	2.0	19
76	An approach for assessing geomorphic river sensitivity across a catchment based on analysis of historical capacity for adjustment. Geomorphology, 2020, 359, 107135.	2.6	19
77	Groundwater depth and topography correlate with vegetation structure of an upland peat swamp, Budderoo Plateau, NSW, Australia. Ecohydrology, 2014, 7, 1392-1402.	2.4	18
78	The dark art of interpretation in geomorphology. Geomorphology, 2021, 390, 107870.	2.6	18
79	Engaging with research impact assessment for an environmental science case study. Nature Communications, 2019, 10, 4542.	12.8	17
80	Metal and petroleum hydrocarbon contamination at Wilkes Station, East Antarctica. Antarctic Science, 2015, 27, 118-133.	0.9	15
81	The Holocene evolution and geomorphology of a chain of ponds, southeast Australia: Establishing a physical template for river management. Catena, 2017, 149, 349-362.	5.0	15
82	The hydrological function of upland swamps in eastern Australia: The role of geomorphic condition in regulating water storage and discharge. Geomorphology, 2018, 310, 29-44.	2.6	14
83	Dramatic reduction in size of the lowland Macquarie River in response to Late Quaternary climate-driven hydrologic change. Quaternary Research, 2018, 90, 360-379.	1.7	14
84	The type and spatial distribution of past waste at the abandoned Wilkes Station, East Antarctica. Polar Record, 2013, 49, 328-347.	0.8	13
85	Rehabilitating upland swamps using environmental histories: a case study of the blue mountains peat swamps, eastern australia. Geografiska Annaler, Series A: Physical Geography, 2015, 97, 337-353.	1.5	13
86	Different depths, different fauna: habitat influences on the distribution of groundwater invertebrates. Hydrobiologia, 2017, 797, 145-157.	2.0	12
87	Geomorphic controls on fluvial carbon exports and emissions from upland swamps in eastern Australia. Science of the Total Environment, 2018, 618, 765-776.	8.0	12
88	A nested hierarchical perspective to enhance interpretations and communication in fluvial geomorphology for use in water resources management: Lessons from the Okavango Delta, Botswana. Geographical Journal, 2018, 184, 192-207.	3.1	12
89	The Geographic Basis of Geomorphic Enquiry. Geography Compass, 2011, 5, 21-34.	2.7	11
90	How Does Restoration of Native Canopy Affect Understory Vegetation Composition? Evidence from Riparian Communities of the Hunter Valley Australia. Restoration Ecology, 2012, 20, 584-592.	2.9	11

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91	Highlighting the Need and Potential for Use of Interdisciplinary Science in Adaptive Environmental Management: The Case of Endangered Upland Swamps in the <scp>B</scp>lue <scp>M</scp>ountains, <scp>NSW</scp>, <scp>A</scp>ustralia. Geographical Research, 2013, 51, 439-453.	1.8	11
92	The impact of urbanisation on community structure, gene abundance and transcription rates of microbes in upland swamps of Eastern Australia. PLoS ONE, 2019, 14, e0213275.	2.5	11
93	Forgotten peatlands of eastern Australia: An unaccounted carbon capture and storage system. Science of the Total Environment, 2020, 730, 139067.	8.0	11
94	Geomorphic controls on the diversity and patterns of fluvial forms along longitudinal profiles. Catena, 2021, 203, 105329.	5.0	11
95	Remediation of metal-contaminated soil in polar environments: Phosphate fixation at Casey Station, East Antarctica. Applied Geochemistry, 2014, 51, 33-43.	3.0	10
96	Interactive effects of waterlogging and atmospheric CO₂ concentration on gas exchange, growth and functional traits of Australian riparian tree seedlings. Ecohydrology, 2017, 10, e1803.	2.4	9
97	The morphology and geomorphic evolution of a large chainâ€ofâ€ponds river system. Earth Surface Processes and Landforms, 2020, 45, 1732-1748.	2.5	9
98	Extent and effect of the 2019-20 Australian bushfires on upland peat swamps in the Blue Mountains, NSW. International Journal of Wildland Fire, 2021, 30, 294.	2.4	9
99	Geochemical insights to the formation of â€œsedimentary buffersâ€: Considering the role of tributaryâ€“trunk stream interactions on catchment-scale sediment flux and drainage network dynamics. Geomorphology, 2014, 219, 1-9.	2.6	8
100	Single-grain OSL dating of fluvial terraces in the upper Hunter catchment, southeastern Australia. Quaternary Geochronology, 2019, 49, 115-122.	1.4	8
101	Application of globally available, coarseâ€resolution digital elevation models for delineating valley bottom segments of varying length across a catchment. Earth Surface Processes and Landforms, 2020, 45, 2788-2803.	2.5	8
102	Semi-automating the calculation of catchment scale geomorphic controls on river diversity using publically available datasets. Catena, 2021, 203, 105354.	5.0	8
103	The re-greening of east coast Australian rivers: An unprecedented riparian transformation. Science of the Total Environment, 2022, 810, 151309.	8.0	8
104	The Relationship between Geomorphic River Structure and Coarse Particulate Organic Matter (CPOM) Storage along the Kangaroo River, New South Wales, Australia. Australian Geographer, 2006, 37, 285-311.	1.7	7
105	Understanding the spatial distribution and physical attributes of upland swamps in the Sydney Basin as a template for their conservation and management. Australian Geographer, 2019, 50, 91-110.	1.7	7
106	Supporting champions in river management. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1445.	6.5	7
107	THE USE OF THE RIVER STYLES FRAMEWORK AS A TOOL TO â€˜WORK WITH NATUREâ€™ IN MANAGING RIVERS IN BRAZIL: EXAMPLES FROM THE MACAÃ‰ CATCHMENT. Revista Brasileira De Geomorfologia, 2019, 20, .	0.2	7
108	A Dynamic, Network Scale Sediment (Dis)Connectivity Model to Reconstruct Historical Sediment Transfer and River Reach Sediment Budgets. Water Resources Research, 2022, 58, .	4.2	7

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109	Managing legacy waste in the presence of cultural heritage at Wilkes Station, East Antarctica. Polar Record, 2015, 51, 151-159.	0.8	6
110	Modelling sediment (dis)connectivity across a river network to understand locationalâ€transmissionâ€filter sensitivity for identifying hotspots of potential geomorphic adjustment. Earth Surface Processes and Landforms, 2021, 46, 2856-2869.	2.5	6
111	Water Sources of Upland Swamps in Eastern Australia: Implications for System Integrity with Aquifer Interference and a Changing Climate. Water (Switzerland), 2019, 11, 102.	2.7	5
112	Development of place-based catenal models for grassland ecosystems of the Upper Yellow River, Western China. Catena, 2022, 213, 106193.	5.0	5
113	Simulating the effect of environmental flow duration on seedling emergence from riparian seed banks of the Upper Hunter River, New South Wales. River Research and Applications, 2020, 36, 607-619.	1.7	4
114	The hydrological function of a large chain-of-ponds: a wetland system with intermittent surface flows. Aquatic Sciences, 2020, 82, 1.	1.5	4
115	Relationships, social networks and the emergence of recovery-based river management: implications for practice and policy. Marine and Freshwater Research, 2021, 72, 481.	1.3	4
116	How long do seeds float? The potential role of hydrochory in passive revegetation management. River Research and Applications, 2022, 38, 1139-1153.	1.7	4
117	Rivers up in smoke: impacts of Australiaâ€™s 2019â€“2020 megafires on riparian systems. International Journal of Wildland Fire, 2022, 31, 720-727.	2.4	4
118	16 Sediment organisation along the upper Hunter River, Australia: a multivariate statistical approach. Developments in Earth Surface Processes, 2007, 11, 409-441.	2.8	3
119	Can the sedimentological and morphological structure of rivers be used to predict characteristics of riparian seed banks?. Geomorphology, 2015, 245, 183-192.	2.6	3
120	Geomorphic characterization of a seasonal river network in semi-arid western India using the River Styles Framework. Journal of Asian Earth Sciences: X, 2022, 7, 100077.	0.9	3
121	A pedagogy of fluvial geomorphology: Incorporating scaffolding and active learning into tertiary education courses. Earth Surface Processes and Landforms, 2022, 47, 1671-1679.	2.5	3
122	Identifying corridors of river recovery in coastal NSW Australia, for use in river management decision support and prioritisation systems. PLoS ONE, 2022, 17, e0270285.	2.5	3
123	Reading the Landscape in Field-Based Fluvial Geomorphology. Developments in Earth Surface Processes, 2014, 18, 231-257.	2.8	2
124	On-site teaching with XRF and XRD: training the next generation of analytical X-ray professionals. Powder Diffraction, 2014, 29, S8-S14.	0.2	2
125	Soil carbon dynamics and aquatic metabolism of a wetâ€“dry tropics wetland system. Wetlands Ecology and Management, 2021, 29, 1-25.	1.5	2
126	LEARNING, DOING AND PROFESSIONAL DEVELOPMENT â€“ THE RIVER STYLES FRAMEWORK AS A TOOL TO SUPPORT THE DEVELOPMENT OF COHERENT AND STRATEGIC APPROACHES FOR LAND AND WATER MANAGEMENT IN BRAZIL. Revista Brasileira De Geomorfologia, 2019, 20, .	0.2	2

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127	River Styles and stream power analysis reveal the diversity of fluvial morphology in a Philippine tropical catchment. Geoscience Letters, 2022, 9, .	3.3	2
128	Spatial and Temporal Variation in Macrophyte Litter Decomposition in a Rare Chain-of-ponds, an Intermittent Stream and Wetland System. Wetlands, 2022, 42, 1.	1.5	2
129	Geomorphic and vegetative river recovery in a small coastal catchment of New South Wales, Australia: Implications for flow hydrology and river management. Geomorphology, 2022, 413, 108334.	2.6	2
130	Prospects for, and Challenges of, Research Design and Training in Crossâ€Disciplinary Environmental Management Research. Geographical Research, 2015, 53, 81-94.	1.8	1
131	Microbial communities of upland peat swamps were no different 1 year after a hazard reduction burn. International Journal of Wildland Fire, 2020, 29, 1021.	2.4	1
132	Quantifying Sediment (Dis)Connectivity in the Modeling of River Systems. , 2021, , .		1
133	Bacterial communities in peat swamps reflect changes associated with catchment urbanisation. Urban Ecosystems, 2022, 25, 1455-1468.	2.4	1
134	Using a fluvial archive to place extreme flood sediment (dis)connectivity dynamics in context of a longer-term record. International Journal of Sediment Research, 2022, , .	3.5	0