Adrian Collins

List of Publications by Year
in descending order

219 papers	10,716 citations	28274 55 h-index	40979 93 g-index
226 all docs	226 docs citations	226 times ranked	7432 citing authors

#	Article	IF	Citations
1	Twenty-three unsolved problems in hydrology (UPH) â€“ a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.	2.6	474
2	The impacts of fine sediment on riverine fish. Hydrological Processes, 2011, 25, 1800-1821.	2.6	433
3	Source type ascription for fluvial suspended sediment based on a quantitative composite fingerprinting technique. Catena, 1997, 29, 1-27.	5.0	376
4	THE IMPACT OF FINE SEDIMENT ON MACROâ€INVERTEBRATES. River Research and Applications, 2012, 28, 1055-1071.	1.7	346
5	Selecting fingerprint properties for discriminating potential suspended sediment sources in river basins. Journal of Hydrology, 2002, 261, 218-244.	5.4	268
6	Apportioning catchment scale sediment sources using a modified composite fingerprinting technique incorporating property weightings and prior information. Geoderma, 2010, 155, 249-261.	5.1	251
7	Documenting catchment suspended sediment sources: problems, approaches and prospects. Progress in Physical Geography, 2004, 28, 159-196.	3.2	249
8	Use of composite fingerprints to determine the provenance of the contemporary suspended sediment load transported by rivers. Earth Surface Processes and Landforms, 1998, 23, 31-52.	2.5	227
9	The catchment sediment budget as a management tool. Environmental Science and Policy, 2008, 11, 136-143.	4.9	221
10	Using hysteresis analysis of high-resolution water quality monitoring data, including uncertainty, to infer controls on nutrient and sediment transfer in catchments. Science of the Total Environment, 2016, 543, 388-404.	8.0	221
11	Sediment source fingerprinting as an aid to catchment management: A review of the current state of knowledge and a methodological decision-tree for end-users. Journal of Environmental Management, 2017, 194, 86-108.	7.8	201
12	The environmental costs and benefits of high-yield farming. Nature Sustainability, 2018, 1, 477-485.	23.7	193
13	Tracing suspended sediment and particulate phosphorus sources in catchments. Journal of Hydrology, 2008, 350, 274-289.	5.4	171
14	Establishing fine-grained sediment budgets for the Pang and Lambourn LOCAR catchments, UK. Journal of Hydrology, 2006, 330, 126-141.	5.4	152
15	THE RELATIONSHIP BETWEEN FINE SEDIMENT AND MACROPHYTES IN RIVERS. River Research and Applications, 2012, 28, 1006-1018.	1.7	148
16	Sediment source fingerprinting: benchmarking recent outputs, remaining challenges and emerging themes. Journal of Soils and Sediments, 2020, 20, 4160-4193.	3.0	124
17	Major agricultural changes required to mitigate phosphorus losses under climate change. Nature Communications, 2017, 8, 161.	12.8	121
18	Sediment source tracing in a lowland agricultural catchment in southern England using a modified procedure combining statistical analysis and numerical modelling. Science of the Total Environment, 2012, 414, 301-317.	8.0	118

#	Article	IF	Citations
19	Tracing sediment loss from eroding farm tracks using a geochemical fingerprinting procedure combining local and genetic algorithm optimisation. Science of the Total Environment, 2010, 408, 5461-5471.	8.0	115
20	Sediment targets for informing river catchment management: international experience and prospects. Hydrological Processes, 2011, 25, 2112-2129.	2.6	113
21	Technical Note: Testing an improved index for analysing storm dischargeâ€“concentration hysteresis. Hydrology and Earth System Sciences, 2016, 20, 625-632.	4.9	108
22	Integrated assessment of catchment suspended sediment budgets: a Zambian example. Land Degradation and Development, 2001, 12, 387-415.	3.9	103
23	Using unsupported lead-210 measurements to investigate soil erosion and sediment delivery in a small Zambian catchment. Geomorphology, 2003, 52, 193-213.	2.6	103
24	High-frequency monitoring of nitrogen and phosphorus response in three rural catchments to the end of the 2011â€“2012 drought in England. Hydrology and Earth System Sciences, 2014, 18, 3429-3448.	4.9	103
25	Changing climate and nutrient transfers: Evidence from high temporal resolution concentration-flow dynamics in headwater catchments. Science of the Total Environment, 2016, 548-549, 325-339.	8.0	102
26	Assessing the likelihood of catchments across England and Wales meeting â€˜good ecological statusâ€™ due to sediment contributions from agricultural sources. Environmental Science and Policy, 2008, 11, 163-170.	4.9	99
27	The changing trend in nitrate concentrations in major aquifers due to historical nitrate loading from agricultural land across England and Wales from 1925 to 2150. Science of the Total Environment, 2016, 542, 694-705.	8.0	95
28	Monitoring and modelling diffuse pollution from agriculture for policy support: UK and European experience. Environmental Science and Policy, 2008, 11, 97-101.	4.9	93
29	Sources of fine sediment recovered from the channel bed of lowland groundwater-fed catchments in the UK. Geomorphology, 2007, 88, 120-138.	2.6	91
30	Flow regulation manipulates contemporary seasonal sedimentary dynamics in the reservoir fluctuation zone of the Three Gorges Reservoir, China. Science of the Total Environment, 2016, 548-549, 410-420.	8.0	89
31	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.	8.0	87
32	Use of the geochemical record preserved in floodplain deposits to reconstruct recent changes in river basin sediment sources. Geomorphology, 1997, 19, 151-167.	2.6	85
33	Using 137Cs measurements to quantify soil erosion and redistribution rates for areas under different land use in the Upper Kaleya River basin, southern Zambia. Geoderma, 2001, 104, 299-323.	5.1	84
34	Sedimentâ€phosphorus dynamics can shift aquatic ecology and cause downstream legacy effects after wildfire in large river systems. Global Change Biology, 2016, 22, 1168-1184.	9.5	83
35	Understanding the controls on deposited fine sediment in the streams of agricultural catchments. Science of the Total Environment, 2016, 547, 366-381.	8.0	83
36	The <scp>N</scp>orth <scp>W</scp>yke <scp>F</scp>arm <scp>P</scp>latform: effect of temperate grassland farming systems on soil moisture contents, runoff and associated water quality dynamics. European Journal of Soil Science, 2016, 67, 374-385.	3.9	81

#	Article	IF	Citations
37	Sediment sources in the Upper Severn catchment: a fingerprinting approach. Hydrology and Earth System Sciences, 1997, 1, 509-521.	4.9	76
38	Spatial mapping of the provenance of storm dust: Application of data mining and ensemble modelling. Atmospheric Research, 2020, 233, 104716.	4.1	76
39	Gully erosion spatial modelling: Role of machine learning algorithms in selection of the best controlling factors and modelling process. Geoscience Frontiers, 2020, 11, 2207-2219.	8.4	76
40	Quantifying fineâ€grained sediment sources in the River Axe catchment, southwest England: application of a Monte Carlo numerical modelling framework incorporating local and genetic algorithm optimisation. Hydrological Processes, 2012, 26, 1962-1983.	2.6	75
41	Interactions between diatoms and fine sediment. Hydrological Processes, 2014, 28, 1226-1237.	2.6	73
42	A review of the policies and implementation of practices to decrease water quality impairment by phosphorus in New Zealand, the UK, and the US. Nutrient Cycling in Agroecosystems, 2016, 104, 289-305.	2.2	73
43	Fine-grained bed sediment storage within the main channel systems of the Frome and Piddle catchments, Dorset, UK. Hydrological Processes, 2007, 21, 1448-1459.	2.6	71
44	The storage and provenance of fine sediment on the channel bed of two contrasting lowland permeable catchments, UK. River Research and Applications, 2007, 23, 429-450.	1.7	71
45	A novel ensemble computational intelligence approach for the spatial prediction of land subsidence susceptibility. Science of the Total Environment, 2020, 726, 138595.	8.0	71
46	Suspended sediment source fingerprinting in a small tropical catchment and some management implications. Applied Geography, 2001, 21, 387-412.	3.7	70
47	Identifying priorities for nutrient mitigation using river concentrationâ€"flow relationships: The Thames basin, UK. Journal of Hydrology, 2014, 517, 1-12.	5.4	68
48	An exploration of individual, social and material factors influencing water pollution mitigation behaviours within the farming community. Land Use Policy, 2018, 70, 16-26.	5.6	67
49	Assessing damaged road verges as a suspended sediment source in the Hampshire Avon catchment, southern United Kingdom. Hydrological Processes, 2010, 24, 1106-1122.	2.6	66
50	Tracing catchment fine sediment sources using the new SIFT (SedIment Fingerprinting Tool) open source software. Science of the Total Environment, 2018, 635, 838-858.	8.0	66
51	Title is missing!. Hydrobiologia, 2003, 497, 91-108.	2.0	63
52	Fingerprinting the origin of fluvial suspended sediment in larger river basins: combining assessment of spatial provenance and source type. Geografiska Annaler, Series A: Physical Geography, 1997, 79, 239-254.	1.5	61
53	The potential for paleolimnology to determine historic sediment delivery to rivers. Journal of Paleolimnology, 2011, 45, 287-306.	1.6	61
54	Developing Demonstration Test Catchments as a platform for transdisciplinary land management research in England and Wales. Environmental Sciences: Processes and Impacts, 2014, 16, 1618-1628.	3.5	58

#	Article	IF	Citations
55	Modelling the cost-effectiveness of mitigation methods for multiple pollutants at farm scale. Science of the Total Environment, 2014, 468-469, 1198-1209.	8.0	58
56	The impact of catchment source group classification on the accuracy of sediment fingerprinting outputs. Journal of Environmental Management, 2017, 194, 16-26.	7.8	56
57	A comparison of conventional and 137 Cs-based estimates of soil erosion rates on arable and grassland across lowland England and Wales. Earth-Science Reviews, 2017, 173, 49-64.	9.1	55
58	The content and storage of phosphorus in fine-grained channel bed sediment in contrasting lowland agricultural catchments in the UK. Geoderma, 2009, 151, 141-149.	5.1	54
59	Tackling agricultural diffuse pollution: What might uptake of farmer-preferred measures deliver for emissions to water and air?. Science of the Total Environment, 2016, 547, 269-281.	8.0	54
60	Cross sector contributions to river pollution in England and Wales: Updating waterbody scale information to support policy delivery for the Water Framework Directive. Environmental Science and Policy, 2014, 42, 16-32.	4.9	53
61	Development of a biotic index using stream macroinvertebrates to assess stress from deposited fine sediment. Freshwater Biology, 2015, 60, 2019-2036.	2.4	53
62	Using a novel tracingâ€tracking framework to source fineâ€grained sediment loss to watercourses at subâ€catchment scale. Hydrological Processes, 2013, 27, 959-974.	2.6	52
63	Reducing soil phosphorus fertility brings potential long-term environmental gains: A UK analysis. Environmental Research Letters, 2017, 12, 063001.	5.2	52
64	The oxygen isotopic composition of phosphate in river water and its potential sources in the Upper River Taw catchment, UK. Science of the Total Environment, 2017, 574, 680-690.	8.0	50
65	The potential impact of projected change in farming by 2015 on the importance of the agricultural sector as a sediment source in England and Wales. Catena, 2009, 79, 243-250.	5.0	49
66	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.	8.0	49
67	Methods for detecting change in hydrochemical time series in response to targeted pollutant mitigation in river catchments. Journal of Hydrology, 2014, 514, 297-312.	5.4	49
68	PSYCHIC â€" A process-based model of phosphorus and sediment transfers within agricultural catchments. Part 2. A preliminary evaluation. Journal of Hydrology, 2008, 350, 303-316.	5.4	48
69	Discharge and nutrient uncertainty: implications for nutrient flux estimation in small streams. Hydrological Processes, 2016, 30, 135-152.	2.6	48
70	Particle size differentiation explains flow regulation controls on sediment sorting in the water-level fluctuation zone of the Three Gorges Reservoir, China. Science of the Total Environment, 2018, 633, 1114-1125.	8.0	48
71	Fingerprinting sub-basin spatial sediment sources using different multivariate statistical techniques and the Modified MixSIR model. Catena, 2018, 164, 32-43.	5.0	48
72	Assessment of a rapid method for quantitative reach-scale estimates of deposited fine sediment in rivers. Geomorphology, 2015, 230, 37-50.	2.6	47

#	Article	IF	Citations
73	The use of composite fingerprints to quantify sediment sources in a wildfire impacted landscape, Alberta, Canada. Science of the Total Environment, 2014, 473-474, 642-650.	8.0	46
74	Does fine sediment source as well as quantity affect salmonid embryo mortality and development?. Science of the Total Environment, 2016, 541, 957-968.	8.0	44
75	Using the Budyko hypothesis for detecting and attributing changes in runoff to climate and vegetation change in the soft sandstone area of the middle Yellow River basin, China. Science of the Total Environment, 2020, 703, 135588.	8.0	44
76	Mapping the spatial sources of atmospheric dust using GLUE and Monte Carlo simulation. Science of the Total Environment, 2020, 723, 138090.	8.0	44
77	Fingerprinting the Origin of Fluvial Suspended Sediment in Larger River Basins: Combining Assessment of Spatial Provenance and Source Type. Geografiska Annaler, Series A: Physical Geography, 1997, 79A, 239-254.	1.5	44
78	Appraisal of phosphorus and sediment transfer in three pilot areas identified for the catchment sensitive farming initiative in England: application of the prototype PSYCHIC model. Soil Use and Management, 2007, 23, 117-132.	4.9	43
79	Contemporary fineâ€grained bed sediment sources across the River Wensum Demonstration Test Catchment, UK. Hydrological Processes, 2013, 27, 857-884.	2.6	43
80	The challenges of modelling phosphorus in a headwater catchment: Applying a â€˜limits of acceptabilityâ€™ uncertainty framework to a water quality model. Journal of Hydrology, 2018, 558, 607-624.	5.4	41
81	A preliminary investigation of the efficacy of riparian fencing schemes for reducing contributions from eroding channel banks to the siltation of salmonid spawning gravels across the south west UK. Journal of Environmental Management, 2010, 91, 1341-1349.	7.8	40
82	Application of the FARMSCOPER tool for assessing agricultural diffuse pollution mitigation methods across the Hampshire Avon Demonstration Test Catchment, UK. Environmental Science and Policy, 2012, 24, 120-131.	4.9	39
83	Source fingerprinting loess deposits in Central Asia using elemental geochemistry with Bayesian and GLUE models. Catena, 2020, 194, 104808.	5.0	39
84	Exceedance of modern â€˜backgroundâ€™ fine-grained sediment delivery to rivers due to current agricultural land use and uptake of water pollution mitigation options across England and Wales. Environmental Science and Policy, 2016, 61, 61-73.	4.9	38
85	Assessing the potential impacts of a revised set of on-farm nutrient and sediment â€˜basicâ€™ control measures for reducing agricultural diffuse pollution across England. Science of the Total Environment, 2018, 621, 1499-1511.	8.0	38
86	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.	5.3	37
87	Extent, frequency and rate of water erosion of arable land in Britain â€“ benefits and challenges for modelling. Soil Use and Management, 2016, 32, 149-161.	4.9	37
88	Using the Boruta algorithm and deep learning models for mapping land susceptibility to atmospheric dust emissions in Iran. Aeolian Research, 2021, 50, 100682.	2.7	37
89	Assessment of the interpretability of data mining for the spatial modelling of water erosion using game theory. Catena, 2021, 200, 105178.	5.0	37
90	The environmental costs and benefits of high-yield farming. Nature Sustainability, 2018, 1, 477-485.	23.7	36

#	Article	IF	Citations
91	Mapping wind erosion hazard with regression-based machine learning algorithms. Scientific Reports, 2020, 10, 20494.	3.3	35
92	The phosphorus content of fluvial suspended sediment in three lowland groundwater-dominated catchments. Journal of Hydrology, 2008, 357, 140-151.	5.4	34
93	Can macroinvertebrate biological traits indicate fineâ€grained sediment conditions in streams?. River Research and Applications, 2017, 33, 1606-1617.	1.7	34
94	Use of sediment source fingerprinting to assess the role of subsurface erosion in the supply of fine sediment in a degraded catchment in the Eastern Cape, South Africa. Journal of Environmental Management, 2017, 194, 27-41.	7.8	34
95	Roles of instrumented farm-scale trials in trade-off assessments of pasture-based ruminant production systems. Animal, 2018, 12, 1766-1776.	3.3	33
96	A soil quality index for evaluation of degradation under land use and soil erosion categories in a small mountainous catchment, Iran. Journal of Mountain Science, 2019, 16, 2577-2590.	2.0	33
97	Predicting sediment inputs to aquatic ecosystems across England and Wales under current environmental conditions. Applied Geography, 2008, 28, 281-294.	3.7	32
98	Factors controlling the temporal variability in dissolved oxygen regime of salmon spawning gravels. Hydrological Processes, 2014, 28, 86-103.	2.6	31
99	Determining the sources of nutrient flux to water in headwater catchments: Examining the speciation balance to inform the targeting of mitigation measures. Science of the Total Environment, 2019, 648, 1179-1200.	8.0	31
100	Integrated modelling for mapping spatial sources of dust in central Asia - An important dust source in the global atmospheric system. Atmospheric Pollution Research, 2021, 12, 101173.	3.8	31
101	Source identification of fine-grained suspended sediment in the Kharaa River basin, northern Mongolia. Science of the Total Environment, 2015, 526, 77-87.	8.0	30
102	Field scale temporal and spatial variability of Î´13C, Î´15N, TC and TN soil properties: Implications for sediment source tracing. Geoderma, 2019, 333, 108-122.	5.1	29
103	A comparison of machine learning models for the mapping of groundwater spring potential. Environmental Earth Sciences, 2020, 79, 1.	2.7	29
104	Predicting potential change in agricultural sediment inputs to rivers across England and Wales by 2015. Marine and Freshwater Research, 2009, 60, 626.	1.3	29
105	Investigating the importance of recreational roads as a sediment source in a mountainous catchment using a fingerprinting procedure with different multivariate statistical techniques and a Bayesian un-mixing model. Journal of Hydrology, 2019, 569, 506-518.	5.4	28
106	Soil loss on the arable lands of the forest-steppe and steppe zones of European Russia and Siberia during the period of intensive agriculture. Geoderma, 2021, 381, 114678.	5.1	28
107	Monte Carlo fingerprinting of the terrestrial sources of different particle size fractions of coastal sediment deposits using geochemical tracers: some lessons for the user community. Environmental Science and Pollution Research, 2019, 26, 13560-13579.	5.3	26
108	A new integrated data mining model to map spatial variation in the susceptibility of land to act as a source of aeolian dust. Environmental Science and Pollution Research, 2020, 27, 42022-42039.	5.3	26

#	Article	IF	Citations
109	Groundwater conceptual models: implications for evaluating diffuse pollution mitigation measures. Quarterly Journal of Engineering Geology and Hydrogeology, 2014, 47, 65-80.	1.4	25
110	Hydrological controls on DOCâ€‰â€¯:â€‰â€¯nitrate resource stoichiometry in a lowland, agricultural catchment, southern UK. Hydrology and Earth System Sciences, 2017, 21, 4785-4802.	4.9	25
111	Field-based determination of controls on runoff and fine sediment generation from lowland grazing livestock fields. Journal of Environmental Management, 2019, 249, 109365.	7.8	25
112	Bed and suspended sediment-associated rare earth element concentrations and fluxes in a polluted Brazilian river system. Environmental Science and Pollution Research, 2018, 25, 34426-34437.	5.3	24
113	Fingerprinting the sources of water-mobilized sediment threatening agricultural and water resource sustainability: Progress, challenges and prospects in China. Science China Earth Sciences, 2019, 62, 2017-2030.	5.2	22
114	Sediment sources, soil loss rates and sediment yields in a Karst plateau catchment in Southwest China. Agriculture, Ecosystems and Environment, 2020, 304, 107114.	5.3	22
115	Emerging priorities in the management of diffuse pollution at catchment scale. International Journal of River Basin Management, 2009, 7, 179-185.	2.7	21
116	Mitigating diffuse pollution from agriculture: International approaches and experience. Science of the Total Environment, 2014, 468-469, 1173-1177.	8.0	21
117	Projected impacts of increased uptake of source control mitigation measures on agricultural diffuse pollution emissions to water and air. Land Use Policy, 2017, 62, 185-201.	5.6	21
118	The potential benefits of on-farm mitigation scenarios for reducing multiple pollutant loadings in prioritised agri-environment areas across England. Environmental Science and Policy, 2017, 73, 100-114.	4.9	21
119	Quantifying the provenance of dune sediments in the Taklimakan Desert using machine learning, multidimensional scaling and sediment source fingerprinting. Catena, 2022, 210, 105902.	5.0	21
120	The scale problem in tackling diffuse water pollution from agriculture: Insights from the <scp>A</scp>von <scp>D</scp>emonstration <scp>T</scp>est <scp>C</scp>atchment programme in <scp>E</scp>ngland. River Research and Applications, 2017, 33, 1527-1538.	1.7	20
121	Sensitivity of source apportionment predicted by a Bayesian tracer mixing model to the inclusion of a sediment connectivity index as an informative prior: Illustration using the Kharka catchment (Nepal). Science of the Total Environment, 2020, 713, 136703.	8.0	20
122	Desertification of Iran in the early twenty-first century: assessment using climate and vegetation indices. Scientific Reports, 2021, 11, 20548.	3.3	20
123	A preliminary assessment of the spatial sources of contemporary suspended sediment in the Ohio River basin, United States, using water quality data from the NASQAN programme in a source tracing procedure. Hydrological Processes, 2012, 26, 326-334.	2.6	19
124	Analysis of fundamental physical factors influencing channel bank erosion: results for contrasting catchments in England and Wales. Environmental Earth Sciences, 2017, 76, 1.	2.7	18
125	Fingerprinting sub-basin spatial suspended sediment sources by combining geochemical tracers and weathering indices. Environmental Science and Pollution Research, 2019, 26, 28401-28414.	5.3	18
126	Predicting land susceptibility to atmospheric dust emissions in central Iran by combining integrated data mining and a regional climate model. Atmospheric Pollution Research, 2021, 12, 172-187.	3.8	18

#	Article	IF	Citations
127	Distributed and dynamic modelling of hydrology, phosphorus and ecology in the Hampshire Avon and Blashford Lakes: Evaluating alternative strategies to meet WFD standards. Science of the Total Environment, 2014, 481, 157-166.	8.0	17
128	Optimizing farmyard manure and cattle slurry applications for intensively managed grasslands based on UK-DNDC model simulations. Science of the Total Environment, 2020, 714, 136672.	8.0	17
129	Spatial modelling of soil salinity: deep or shallow learning models?. Environmental Science and Pollution Research, 2021, 28, 39432-39450.	5.3	17
130	Phosphorus Storage in Fine Channel Bed Sediments. Water, Air and Soil Pollution, 2006, 6, 371-380.	0.8	16
131	Sediment transfer at different spatial and temporal scales in the Sichuan Hilly Basin, China: Synthesizing data from multiple approaches and preliminary interpretation in the context of climatic and anthropogenic drivers. Science of the Total Environment, 2017, 598, 319-329.	8.0	16
132	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.	1.7	16
133	Colour as reliable tracer to identify the sources of historically deposited flood bench sediment in the Transkei, South Africa: A comparison with mineral magnetic tracers before and after hydrogen peroxide pre-treatment. Catena, 2018, 160, 242-251.	5.0	16
134	Tracing sediment sources in a mountainous forest catchment under road construction in northern Iran: comparison of Bayesian and frequentist approaches. Environmental Science and Pollution Research, 2018, 25, 30979-30997.	5.3	16
135	Elucidating intra-storm variations in suspended sediment sources using a Bayesian fingerprinting approach. Journal of Hydrology, 2021, 596, 126115.	5.4	16
136	Microbial biomass phosphorus contributions to phosphorus solubility in riparian vegetated buffer strip soils. Biology and Fertility of Soils, 2013, 49, 1237-1241.	4.3	15
137	A method for uncertainty constraint of catchment discharge and phosphorus load estimates. Hydrological Processes, 2018, 32, 2779-2787.	2.6	15
138	Current advisory interventions for grazing ruminant farming cannot close exceedance of modern background sediment loss â€" Assessment using an instrumented farm platform and modelled scaling out. Environmental Science and Policy, 2021, 116, 114-127.	4.9	15
139	An exploratory study on the use of different composite magnetic and colour fingerprints in aeolian sediment provenance fingerprinting. Catena, 2021, 200, 105182.	5.0	15
140	Mitigating diffuse water pollution from agriculture: riparian buffer strip performance with width.. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources, 0, , 1-15.	1.0	15
141	Resolving clinical diagnoses for syndromic cleft lip and/or palate phenotypes using wholeâ€exome sequencing. Clinical Genetics, 2015, 88, 441-449.	2.0	14
142	Sediment source fingerprinting for informing catchment management: Methodological approaches, problems and uncertainty. Journal of Environmental Management, 2017, 194, 1-3.	7.8	14
143	Are source groups always appropriate when sediment fingerprinting? The direct comparison of source and sediment samples as a methodological step. River Research and Applications, 2017, 33, 1553-1563.	1.7	14
144	Fingerprinting the contribution of quarrying to fineâ€grained bed sediment in a mountainous catchment, Iran. River Research and Applications, 2019, 35, 290-300.	1.7	14

#	Article	IF	Citations
145	Sediment loss in response to scheduled pasture ploughing and reseeding: The importance of soil moisture content in controlling risk. Soil and Tillage Research, 2020, 204, 104746.	5.6	14
146	Evaluation of diffuse pollution model applications in EUROHARP catchments with limited data. Journal of Environmental Monitoring, 2009, 11, 554.	2.1	13
147	Lattice Boltzmann method for the fractional advection-diffusion equation. Physical Review E, 2016, 93, 043310.	2.1	13
148	Determining the Effect of Drying Time on Phosphorus Solubilization from Three Agricultural Soils under Climate Change Scenarios. Journal of Environmental Quality, 2017, 46, 1131-1136.	2.0	13
149	Developing a sustainable strategy to conserve reservoir marginal landscapes. National Science Review, 2018, 5, 10-14.	9.5	13
150	HighÂfrequency un-mixing of soil samples using a submerged spectrophotometer in a laboratory settingâ€"implications for sediment fingerprinting. Journal of Soils and Sediments, 2022, 22, 348-364.	3.0	13
151	Prolonged heavy rainfall and land use drive catchment sediment source dynamics: Appraisal using multiple biotracers. Water Research, 2022, 216, 118348.	11.3	13
152	Fingerprinting source contributions to bed sedimentâ€associated organic matter in the headwater subcatchments of the River Itchen SAC, Hampshire, UK. River Research and Applications, 2017, 33, 1515-1526.	1.7	12
153	Variability in the mineral magnetic properties of soils and sediments within a single field in the Cape Fold mountains, South Africa: Implications for sediment source tracing. Catena, 2018, 163, 172-183.	5.0	12
154	The sources and dynamics of fine-grained sediment degrading the Freshwater Pearl Mussel (Margaritifera margaritifera) beds of the River Torridge, Devon, UK. Science of the Total Environment, 2019, 657, 420-434.	8.0	12
155	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.	1.7	11
156	The fine sediment conundrum; quantifying, mitigating and managing the issues. River Research and Applications, 2017, 33, 1509-1514.	1.7	11
157	Storm dust source fingerprinting for different particle size fractions using colour and magnetic susceptibility and a Bayesian un-mixing model. Environmental Science and Pollution Research, 2020, 27, 31578-31594.	5.3	11
158	Sediment source apportionment using optical property composite signatures in a rural catchment, Brazil. Catena, 2021, 202, 105208.	5.0	11
159	Can agri-environment initiatives control sediment loss in the context of extreme winter rainfall?. Journal of Cleaner Production, 2021, 311, 127593.	9.3	11
160	The potential for colour to provide a robust alternative to high-cost sediment source fingerprinting: Assessment using eight catchments in England. Science of the Total Environment, 2021, 792, 148416.	8.0	11
161	Catchment-wide variations and biogeochemical time lags in soil fatty acid carbon isotope composition for different land uses: Implications for sediment source classification. Organic Geochemistry, 2020, 146, 104048.	1.8	11
162	Novel approaches to investigating spatial variability in channel bank total phosphorus at the catchment scale. Catena, 2021, 202, 105223.	5.0	10

#	Article	IF	Citations
163	A New Framework for Modelling Fine Sediment Transport in Rivers Includes Flocculation to Inform Reservoir Management in Wildfire Impacted Watersheds. Water (Switzerland), 2021, 13, 2319.	2.7	10
164	Elucidating suspended sediment dynamics in a glacierized catchment after an exceptional erosion event: The Djankuat catchment, Caucasus Mountains, Russia. Catena, 2021, 203, 105285.	5.0	10
165	A rapid and inexpensive colour-based sediment tracing method incorporating hydrogen peroxide sample treatment as an alternative to quantitative source fingerprinting for catchment management. Journal of Environmental Management, 2022, 311, 114780.	7.8	10
166	Mapping the combined risk of agricultural fine sediment input and accumulation for riverine ecosystems across England and Wales. Ecological Indicators, 2016, 70, 209-221.	6.3	9
167	Prediction of storm transfers and annual loads with data-based mechanistic models using high-frequency data. Hydrology and Earth System Sciences, 2017, 21, 6425-6444.	4.9	9
168	An analysis of potential controls on long-term 137Cs accumulation in the sediments of UK lakes. Journal of Paleolimnology, 2018, 60, 1-30.	1.6	8
169	A palaeoenvironmental study of particle sizeâ€specific connectivityâ€"New insights and implications from the West Sussex Rother Catchment, United Kingdom. River Research and Applications, 2019, 35, 1192-1202.	1.7	8
170	Thorium content in soil, water and sediment samples and fluvial sediment-associated transport in a catchment system with a semiarid-coastal interface, Brazil. Environmental Science and Pollution Research, 2019, 26, 33532-33540.	5.3	8
171	Distribution of rare earth elements in soils of contrasting geological and pedological settings to support human health assessment and environmental policies. Environmental Geochemistry and Health, 2022, 44, 861-872.	3.4	8
172	Tackling unintended consequences of grazing livestock farming: Multi-scale assessment of co-benefits and trade-offs for water pollution mitigation scenarios. Journal of Cleaner Production, 2022, 336, 130449.	9.3	8
173	Diffuse water pollution during recent extreme wet-weather in the UK: Environmental damage costs and insight into the future?. Journal of Cleaner Production, 2022, 338, 130633.	9.3	8
174	Mitigating sediment delivery to watercourses during the salmonid spawning season: Potential effects of delayed wheelings and cover crops in a chalk catchment, southern England. International Journal of River Basin Management, 2009, 7, 209-220.	2.7	7
175	Sedimentary chronology reinterpreted from Changshou Lake of the Three Gorges Reservoir Area reveals natural and anthropogenic controls on sediment production. Environmental Science and Pollution Research, 2018, 25, 17620-17633.	5.3	7
176	Subsurface sources contribute substantially to fineâ€grained suspended sediment transported in a tropical <scp>W</scp>est <scp>A</scp>frican watershed in <scp>B</scp>urkina <scp>F</scp>aso. Land Degradation and Development, 2018, 29, 4092-4105.	3.9	7
177	Experimental Investigation of Erosion Characteristics of Fine-Grained Cohesive Sediments. Water (Switzerland), 2020, 12, 1511.	2.7	7
178	Hillslope and groundwater contributions to streamflow in a Rocky Mountain watershed underlain by glacial till and fractured sedimentary bedrock. Hydrology and Earth System Sciences, 2021, 25, 237-255.	4.9	7
179	Accumulation of trace metals in freshwater macroinvertebrates across metal contamination gradients. Environmental Pollution, 2021, 276, 116721.	7.5	7
180	The scope for a system-based approach to determine fine sediment targets for chalk streams. Catena, 2021, 206, 105541.	5.0	7

#	Article	IF	Citations
181	Particulate organic carbon sources and delivery to river channels in the Somerset Levels ECSFDI priority catchment, southwest UK. International Journal of River Basin Management, 2009, 7, 277-291.	2.7	6
182	Use of farm survey returns from the Demonstration Test Catchments to update modelled predictions of sediment and total phosphorus loadings from subsurface drains across England and Wales. Soil Use and Management, 2016, 32, 127-137.	4.9	6
183	The stable oxygen isotope ratio of resin extractable phosphate derived from fresh cattle faeces. Rapid Communications in Mass Spectrometry, 2018, 32, 703-710.	1.5	6
184	Fingerprinting sub-basin spatial sediment sources in a large Iranian catchment under dry-land cultivation and rangeland farming: Combining geochemical tracers and weathering indices. Journal of Hydrology: Regional Studies, 2019, 24, 100613.	2.4	6
185	Does cattle and sheep grazing under best management significantly elevate sediment losses? Evidence from the North Wyke Farm Platform, UK. Journal of Soils and Sediments, 2021, 21, 1875-1889.	3.0	6
186	Separating natural from human enhanced methane emissions in headwater streams. Nature Communications, 2022, 13, .	12.8	6
187	Interpreting sedimentation dynamics at Longxi catchment in the Three Gorges Area, China, using Cs-137 activity, particle size and rainfall erosivity. Journal of Mountain Science, 2016, 13, 857-869.	2.0	5
188	Comparing Extraction Methods for Biomarker Steroid Characterisation from Soil and Slurry. Water, Air, and Soil Pollution, 2020, 231, 524.	2.4	5
189	The representation of sediment source group tracer distributions in Monte Carlo uncertainty routines for fingerprinting: An analysis of accuracy and precision using data for four contrasting catchments. Hydrological Processes, 2020, 34, 2381-2400.	2.6	5
190	Using different size fractions to source fingerprint fine-grained channel bed sediment in a large drainage basin in Iran. Catena, 2021, 200, 105173.	5.0	5
191	Dynamics of fluvial hydro-sedimentological, nutrient, particulate organic matter and effective particle size responses during the U.K. extreme wet winter of 2019â€“2020. Science of the Total Environment, 2021, 774, 145722.	8.0	5
192	Anthropogenic sediment traps and network dislocation in a lowland UK river. Earth Surface Processes and Landforms, 0, , .	2.5	5
193	Exploring the effects of land management change on productivity, carbon and nutrient balance: Application of an Ensemble Modelling Approach to the upper River Taw observatory, UK. Science of the Total Environment, 2022, 824, 153824.	8.0	5
194	Soil methane (CH₄) fluxes in cropland with permanent pasture and riparian buffer strips with different vegetation[#]. Journal of Plant Nutrition and Soil Science, 2022, 185, 132-144.	1.9	5
195	Soil N2O and CH4 emissions from fodder maize production with and without riparian buffer strips of differing vegetation. Plant and Soil, 2022, 477, 297-318.	3.7	5
196	Anthropogenic and Climate-Exacerbated Landscape Disturbances Converge to Alter Phosphorus Bioavailability in an Oligotrophic River. Water (Switzerland), 2021, 13, 3151.	2.7	4
197	Assessing catchment scale water quality of agri-food systems and the scope for reducing unintended consequences using spatial life cycle assessment (LCA). Journal of Environmental Management, 2022, 318, 115563.	7.8	4
198	The contribution of farm-scale experiments to the understanding of soil processes and implications for ecosystem services. European Journal of Soil Science, 2016, 67, 359-359.	3.9	3

#	Article	IF	Citations
199	Dry cropland changes in China's Three Gorges Reservoir Region during the period 1990 to 2015. Journal of Mountain Science, 2020, 17, 516-527.	2.0	3
200	Deposition and erosion behaviour of cohesive sediments in the upper River Taw observatory, southwest UK: Implications for management and modelling. Journal of Hydrology, 2021, 598, 126145.	5.4	3
201	The costs and efficacy of sediment mitigation measures for representative farm types across England and Wales. Proceedings of the International Association of Hydrological Sciences, 0, 367, 382-388.	1.0	3
202	The efficiency of elemental geochemistry and weathering indices as tracers in aeolian sediment provenance fingerprinting. Catena, 2022, 210, 105932.	5.0	3
203	(Un)willingness to contribute financially towards advice surrounding diffuse water pollution: the perspectives of farmers and advisors. Journal of Agricultural Education and Extension, 2023, 29, 327-350.	2.2	3
204	Riparian buffer strips influence nitrogen losses as nitrous oxide and leached N from upslope permanent pasture. Agriculture, Ecosystems and Environment, 2022, 336, 108031.	5.3	3
205	The Impact of Metal-Rich Sediments Derived from Mining on Freshwater Stream Life. Reviews of Environmental Contamination and Toxicology, 2018, 248, 111-189.	1.3	2
206	Insights into bulk stable isotope alteration during sediment redistribution to edge-of-field: impact on sediment source apportionment. Biogeochemistry, 2021, 155, 263-281.	3.5	2
207	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
208	The potential for gamma-emitting radionuclides to contribute to an understanding of erosion processes in South Africa. Proceedings of the International Association of Hydrological Sciences, 0, 375, 29-34.	1.0	2
209	Preface: Land use and climate change impacts on erosion and sediment transport. Proceedings of the International Association of Hydrological Sciences, 0, 381, 1-1.	1.0	2
210	Decision support framework to identify lakes that are likely to meet water quality targets if external inputs of phosphorus from agriculture are reduced. , 2019, 38, 489-501.		2
211	Natural and anthropogenic impacts on the geochemical composition and metal speciation of fine sediment in a glacier-fed Canadian river basin. Journal of Soils and Sediments, 2022, 22, 365-380.	3.0	2
212	The effect of food timing on fat oxidation during exercise and resting recovery. Proceedings of the Nutrition Society, 2012, 71, .	1.0	1
213	The Importance of Sustained Grassland and Environmental Research: A Case Study From North Wyke Research Station, UK, 1982â€"2017. Advances in Agronomy, 2018, , 161-235.	5.2	1
214	A Generic Approach for Live Prediction of the Risk of Agricultural Field Runoff and Delivery to Watercourses: Linking Parsimonious Soil-Water-Connectivity Models With Live Weather Data Apis in Decision Tools. Frontiers in Sustainable Food Systems, 2019, 3, .	3.9	1
215	Sediment detachment by raindrop impact on grassland and arable fields: an investigation of controls. Journal of Soils and Sediments, 2022, 22, 692-703.	3.0	1
216	Coupled steroid and phosphorus leaching from cattle slurry at lysimeter scale. Journal of Contaminant Hydrology, 2022, 247, 103979.	3.3	1

#	Article	IF	Citations
217	Pre- and post-menopausal differences in body fat distribution between Caucasians and South Asians: results from the Vitamin D, Food Intake, Nutrition and Exposure to Sunlight in Southern England (D-FINES) Study. Proceedings of the Nutrition Society, 2010, 69, .	1.0	0
218	The comparative effects of intermittent versus continuous energy restriction on postprandial glucose-lipid metabolism following 5 % weight-loss: interim analysis of an ongoing study. Proceedings of the Nutrition Society, 2016, 75, .	1.0	0
219	Using catchment characteristics to model seasonality of dissolved organic carbon fluxes in semi-arid mountainous headwaters. Environmental Monitoring and Assessment, 2020, 192, 674.	2.7	0