Tim Burt

List of Publications by Year
in descending order

131 papers	7,099 citations	50170 46 h-index	64668 79 g-index
136 all docs	136 docs citations	136 times ranked	6505 citing authors

#	Article	IF	Citations
1	The role of topography in controlling throughflow generation. Earth Surfaces Processes, 1978, 3, 331-344.	0.7	307
2	Topographic controls of soil moisture distributions. Journal of Soil Science, 1985, 36, 469-486.	1.2	287
3	Long-term accumulation and transport of anthropogenic phosphorus in three river basins. Nature Geoscience, 2016, 9, 353-356.	5.4	282
4	Hydraulic conductivity in frozen soils. Earth Surfaces Processes, 1976, 1, 349-360.	0.7	235
5	Nitrogen Removal by Riparian Buffers along a European Climatic Gradient: Patterns and Factors of Variation. Ecosystems, 2003, 6, 0020-0030.	1.6	214
6	Linking hydrology and biogeochemistry in complex landscapes. Progress in Physical Geography, 2005, 29, 297-316.	1.4	194
7	Denitrification in riparian buffer zones: the role of floodplain hydrology. Hydrological Processes, 1999, 13, 1451-1463.	1.1	178
8	Long term records of riverine dissolved organic matter. Biogeochemistry, 2003, 64, 165-178.	1.7	164
9	Hydrological studies on blanket peat: the significance of the acrotelm-catotelm model. Journal of Ecology, 2003, 91, 86-102.	1.9	161
10	Sustainable Phosphorus Management and the Need for a Long-Term Perspective: The Legacy Hypothesis. Environmental Science & Technology, 2014, 48, 8417-8419.	4.6	161
11	Can climate change explain increases in DOC flux from upland peat catchments?. Science of the Total Environment, 2004, 326, 95-112.	3.9	158
12	Carbon budget for a British upland peat catchment. Science of the Total Environment, 2003, 312, 133-146.	3.9	155
13	Runoff production in blanket peat covered catchments. Water Resources Research, 2003, 39, .	1.7	150
14	Nitrate concentrations and fluxes in the River Thames over 140 years (1868â€“2008): are increases irreversible?. Hydrological Processes, 2010, 24, 2657-2662.	1.1	132
15	Denitrification in riparian buffer zones: the role of floodplain hydrology. , 1999, 13, 1451.		129
16	Whither field hydrology? The need for discovery science and outrageous hydrological hypotheses. Water Resources Research, 2015, 51, 5919-5928.	1.7	127
17	Patterns of denitrification rates in European alluvial soils under various hydrological regimes. Freshwater Biology, 2007, 52, 252-266.	1.2	126
18	If you have a hammer everything looks like a nail: traditional versus participatory model building. Interdisciplinary Science Reviews, 2007, 32, 263-282.	1.0	121

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19	Release of dissolved organic carbon from upland peat. Hydrological Processes, 2002, 16, 3487-3504.	1.1	118
20	Hydraulic conductivity in upland blanket peat: measurement and variability. Hydrological Processes, 2003, 17, 1227-1237.	1.1	118
21	Role of floodplain sediments in reducing the nitrate concentration of subsurface run-off: A case study in the Cotswolds, UK. Hydrological Processes, 1993, 7, 287-295.	1.1	110
22	Time series analysis of long-term river dissolved organic carbon records. Hydrological Processes, 2004, 18, 893-911.	1.1	109
23	Application of ground-penetrating radar to the identification of subsurface piping in blanket peat. Earth Surface Processes and Landforms, 2002, 27, 235-249.	1.2	98
24	Infiltration, runoff and sediment production in blanket peat catchments: implications of field rainfall simulation experiments. Hydrological Processes, 2002, 16, 2537-2557.	1.1	95
25	Hydrological flowpaths and nitrate removal rates within a riparian floodplain along a fourth-order stream in Brittany (France). Hydrological Processes, 2003, 17, 1177-1195.	1.1	89
26	The multi-annual carbon budget of a peat-covered catchment. Science of the Total Environment, 2009, 407, 4084-4094.	3.9	88
27	Sediment yield and delivery in the blanket peat moorlands of the southern Pennines. Earth Surface Processes and Landforms, 1991, 16, 255-271.	1.2	84
28	Flux of dissolved organic carbon from U.K. rivers. Global Biogeochemical Cycles, 2007, 21, .	1.9	84
29	Nitrate pollution in intensively farmed regions: What are the prospects for sustaining highâ€quality groundwater?. Water Resources Research, 2011, 47, .	1.7	84
30	Stream nitrate levels in a small catchment in south west England over a period of 15 years (1970-1985). Hydrological Processes, 1988, 2, 267-284.	1.1	83
31	Macroporosity and infiltration in blanket peat: the implications of tension disc infiltrometer measurements. Hydrological Processes, 2001, 15, 289-303.	1.1	83
32	Toward more detailed field monitoring of variable source areas. Water Resources Research, 1978, 14, 1123-1131.	1.7	82
33	Predicting the future DOC flux from upland peat catchments. Journal of Hydrology, 2005, 300, 126-139.	2.3	82
34	Toward a conceptual model of floodplain water table response. Water Resources Research, 2004, 40, .	1.7	79
35	More rain, less soil: longâ€term changes in rainfall intensity with climate change. Earth Surface Processes and Landforms, 2016, 41, 563-566.	1.2	72
36	Anticipating and Managing Future Trade-offs and Complementarities between Ecosystem Services. Ecology and Society, 2013, 18, .	1.0	70

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37	The flux of DOC from the UK â€“ Predicting the role of soils, land use and net watershed losses. Journal of Hydrology, 2012, 448-449, 149-160.	2.3	63
38	North Atlantic Oscillation amplifies orographic precipitation and river flow in upland Britain. Water Resources Research, 2013, 49, 3504-3515.	1.7	62
39	Trends in Drought Frequency â€“ the Fate of DOC Export From British Peatlands. Climatic Change, 2006, 76, 339-359.	1.7	61
40	Nitrate in United Kingdom Rivers: Policy and Its Outcomes Since 1970. Environmental Science & Technology, 2011, 45, 175-181.	4.6	60
41	Long-term rainfall and streamflow records for north central England: putting the Environmental Change Network site at Moor House, Upper Teesdale, in context. Hydrological Sciences Journal, 1998, 43, 775-787.	1.2	58
42	Laboratory experiments on drought and runoff in blanket peat. European Journal of Soil Science, 2002, 53, 675-690.	1.8	58
43	Fluxes of dissolved carbon dioxide and inorganic carbon from an upland peat catchment: implications for soil respiration. Biogeochemistry, 2005, 73, 515-539.	1.7	58
44	Importance of long-term monitoring for detecting environmental change: lessons from a lowland river in south east England. Biogeosciences, 2008, 5, 1529-1535.	1.3	58
45	Long-term monitoring of river water nitrate: how much data do we need?. Journal of Environmental Monitoring, 2010, 12, 71-79.	2.1	57
46	Changes in stream nitrate concentrations due to land management practices, ecological succession, and climate: Developing a systems approach to integrated catchment response. Water Resources Research, 2003, 39, .	1.7	54
47	Synoptic Climatology of Air Pollution in Moscow. Theoretical and Applied Climatology, 1998, 61, 85-102.	1.3	49
48	Changing patterns of heavy rainfall in upland areas: a case study from northern England. International Journal of Climatology, 2012, 32, 518-532.	1.5	49
49	A third paradox in catchment hydrology and biogeochemistry: decoupling in the riparian zone. Hydrological Processes, 2005, 19, 2087-2089.	1.1	47
50	Rainfall Distributions in Sri Lanka in Time and Space: An Analysis Based on Daily Rainfall Data. Climate, 2014, 2, 242-263.	1.2	47
51	Flow frequency responses to hardwood-to-grass conversion and subsequent succession. Hydrological Processes, 1992, 6, 179-188.	1.1	46
52	Identification and Characterization of Pedogeomorphological Processes on a Hillslope. Soil Science Society of America Journal, 2002, 66, 1897-1910.	1.2	45
53	On the value of longâ€term, lowâ€frequency water quality sampling: avoiding throwing the baby out with the bathwater. Hydrological Processes, 2011, 25, 828-830.	1.1	44
54	Long-term changes in hydrological pathways in an upland peat catchmentâ€"recovery from severe drought?. Journal of Hydrology, 2006, 321, 5-20.	2.3	41

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55	Statistical analysis of nitrate concentrations from the Rivers Frome and Piddle (Dorset, UK) for the period 1965â€“2007. Ecohydrology, 2009, 2, 55-65.	1.1	41
56	Fluvial flux of nitrogen from Great Britain 1974â€“2005 in the context of the terrestrial nitrogen budget of Great Britain. Global Biogeochemical Cycles, 2009, 23, .	1.9	41
57	Temporal and spatial analysis of nitrate concentrations from the Frome and Piddle catchments in Dorset (UK) for water years 1978 to 2007: Evidence for nitrate breakthrough?. Science of the Total Environment, 2008, 407, 507-526.	3.9	40
58	The effect of forestry drainage operations on upland sediment yields: The results of a storm-based study. Earth Surface Processes and Landforms, 1983, 8, 339-346.	1.2	39
59	Human impact on longâ€term organic carbon export to rivers. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 947-965.	1.3	37
60	The contribution of throughflow to storm runoff: An evaluation of a chemical mixing model. Earth Surface Processes and Landforms, 1982, 7, 565-574.	1.2	36
61	What do we still need to know about the ecohydrology of riparian zones?. Ecohydrology, 2010, 3, 373-377.	1.1	36
62	Shifts in discharge-concentration relationships as a small catchment recover from severe drought. Hydrological Processes, 2015, 29, 498-507.	1.1	34
63	Farming for Water Quality: Balancing Food Security and Nitrate Pollution in UK River Basins. Annals of the American Association of Geographers, 2013, 103, 397-407.	3.0	33
64	Short-term nitrogen transformation rates in riparian wetland soil determined with nitrogen-15. Biology and Fertility of Soils, 2003, 38, 129-136.	2.3	32
65	Changing patterns of daily precipitation totals at the Coweeta Hydrologic Laboratory, North Carolina, <scp>USA</scp>. International Journal of Climatology, 2018, 38, 94-104.	1.5	30
66	Monitoring change in hydrological systems. Science of the Total Environment, 2003, 310, 9-16.	3.9	29
67	The complete carbon budget of a drained peat catchment. Soil Use and Management, 2010, 26, 261-273.	2.6	29
68	Stimulation from simulation? A teaching model of hillslope hydrology for use on microcomputers. Journal of Geography in Higher Education, 1986, 10, 23-39.	1.4	28
69	Some aspects of the three-dimensional heat island in Moscow. International Journal of Climatology, 1997, 17, 1451-1465.	1.5	28
70	Monitoring fluvial water chemistry for trend detection: hydrological variability masks trends in datasets covering fewer than 12 years. Journal of Environmental Monitoring, 2011, 13, 514.	2.1	27
71	Declines in the dissolved organic carbon (DOC) concentration and flux from the UK. Journal of Hydrology, 2018, 556, 775-789.	2.3	26
72	Intercomparison of Evapotranspiration Over the Savannah Volta Basin in West Africa Using Remote Sensing Data. Sensors, 2008, 8, 2736-2761.	2.1	25

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73	Inter-decadal variability in daily rainfall at Durham (UK) since the 1850s. International Journal of Climatology, 2007, 27, 945-956.	1.5	24
74	The flux of dissolved nitrogen from the UK â€" Evaluating the role of soils and land use. Science of the Total Environment, 2012, 434, 90-100.	3.9	24
75	Seeing the climate through the trees: observing climate and forestry impacts on streamflow using a 60â€year record. Hydrological Processes, 2015, 29, 473-480.	1.1	24
76	The multi-annual nitrogen budget of a peat-covered catchment â€" Changing from sink to source?. Science of the Total Environment, 2012, 433, 178-188.	3.9	23
77	Forest land cover continues to exacerbate freshwater acidification despite decline in sulphate emissions. Environmental Pollution, 2012, 167, 58-69.	3.7	22
78	The fluvial flux of particulate organic matter from the UK: the emission factor of soil erosion. Earth Surface Processes and Landforms, 2016, 41, 61-71.	1.2	22
79	Modelling the spatial variability in floodplain soil contamination during flood events to improve chemical mass balance estimates. , 1998, 12, 1233-1255.		21
80	Stream nitrate levels in a small catchment in south west England over a period of 35 years (1970â€"2005). Hydrological Processes, 2009, 23, 2056-2068.	1.1	20
81	The flux of organic matter through a peatland ecosystem: The role of cellulose, lignin, and their control of the ecosystem oxidation state. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 1655-1671.	1.3	19
82	The relationship between throughflow generation and the solute concentration of soil and stream water. Earth Surfaces Processes, 1979, 4, 257-266.	0.7	18
83	Spatial variation in solutional denudation and soil moisture over a hillslope hollow. Earth Surface Processes and Landforms, 1983, 8, 151-160.	1.2	18
84	The effective oxidation state of a peatland. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 145-158.	1.3	18
85	The fluvial flux of total reactive and total phosphorus from the UK in the context of a national phosphorus budget: comparing UK river fluxes with phosphorus trade imports and exports. Biogeochemistry, 2016, 130, 31-51.	1.7	17
86	Do nitrogen inputs stimulate dissolved organic carbon production in upland peat bogs?. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	1.9	16
87	A homogenous daily rainfall record for the Radcliffe Observatory, Oxford, from the 1820s. Water Resources Research, 2011, 47, .	1.7	16
88	The total phosphorus budget of a peatâ€covered catchment. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1814-1828.	1.3	16
89	Carbon Monoxide and Nitrogen Oxides Pollution in Moscow. Water, Air, and Soil Pollution, 1999, 112, 107-131.	1.1	15
90	Nonâ€stationarity in long time series: some curious reversals in the â€˜memoryâ€™ effect. Hydrological Processes, 2007, 21, 3529-3531.	1.1	15

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91	NITRATE LOSSES IN SOIL DRAINAGE WATERS IN RELATION TO WATER FLOW RATE ON A DECIDUOUS WOODLAND SITE. Journal of Soil Science, 1981, 32, 433-441.	1.2	14
92	Rill erosion along the thalweg of a hillslope hollow: A case study from the cotswold hills, Central England. Earth Surface Processes and Landforms, 1994, 19, 377-385.	1.2	14
93	Time series analysis of the world's longest fluvial nitrate record: evidence for changing states of catchment saturation. Hydrological Processes, 2015, 29, 434-444.	1.1	14
94	Thermodynamic Control of the Carbon Budget of a Peatland. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 1863-1878.	1.3	14
95	The Impact of Peatland Restoration on Local Climate: Restoration of a Cool Humid Island. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 1696-1713.	1.3	14
96	The importance of sewage effluent discharge in the export of dissolved organic carbon from U.K. rivers. Hydrological Processes, 2019, 33, 1851-1864.	1.1	14
97	POTASSIUM CHEMISTRY OF A SMALL UPLAND STREAM FOLLOWING A MAJOR DROUGHT. Hydrological Processes, 1997, 11, 189-201.	1.1	13
98	Has the composition of fluvial DOC changed? Spatiotemporal patterns in the DOCâ€color relationship. Global Biogeochemical Cycles, 2010, 24, .	1.9	13
99	Analysis of spatial water quality and stream networks in the southern Cotswolds during and after the drought of 1976. Earth Surfaces Processes, 1978, 3, 59-69.	0.7	11
100	Investigating contemporary and historical sediment inputs to Slapton Higher Ley: an analysis of the robustness of source ascription methods when applied to lake sediment data. Hydrological Processes, 2002, 16, 3467-3486.	1.1	11
101	An analysis of rainfall across the British Isles in the 1870s. International Journal of Climatology, 2015, 35, 2934-2947.	1.5	11
102	A Molecular Budget for a Peatland Based Upon ¹³C Solidâ€State Nuclear Magnetic Resonance. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 547-560.	1.3	11
103	The fate of suspended sediment and particulate organic carbon in transit through the channels of a river catchment. Hydrological Processes, 2018, 32, 146-159.	1.1	11
104	The distribution of solute processes on an acid hillslope and the delivery of solutes to a stream: I. Exchangeable bases. Earth Surface Processes and Landforms, 1999, 24, 781-797.	1.2	10
105	Monitoring soil erosion on agricultural land: results and implications for the Rother valley, West Sussex, UK. Earth Surface Processes and Landforms, 2020, 45, 3931-3942.	1.2	10
106	The permanence of stream networks in britain: Some further comments. Earth Surface Processes and Landforms, 1982, 7, 327-332.	1.2	9
107	Linking pulses of atmospheric deposition to DOC release in an upland peatâ€covered catchment. Global Biogeochemical Cycles, 2008, 22, .	1.9	9
108	The UKâ€™s total nitrogen budget from 1990 to 2020: a transition from source to sink?. Biogeochemistry, 2016, 129, 325-340.	1.7	9

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109	Handling excess nitrates. Nature, 1990, 348, 291-291.	13.7	8
110	The global transformation of geomorphology. Geological Society Memoir, 2022, 58, 1-17.	0.9	6
111	The distribution of solute processes on an acid hillslope and the delivery of solutes to a stream: II. Exchangeable Al3+. Earth Surface Processes and Landforms, 1999, 24, 851-865.	1.2	5
112	Homogenising the rainfall record at Durham for the 1870s. Hydrological Sciences Journal, 2009, 54, 199-209.	1.2	5
113	A spatial total nitrogen budget for Great Britain. Science of the Total Environment, 2020, 728, 138864.	3.9	5
114	Local climate impacts from ongoing restoration of a peatland. Hydrological Processes, 2022, 36, .	1.1	5
115	Placing heavy rainfall events in context using long time series: An example from the North York Moors. Weather, 2010, 65, 88-94.	0.6	4
116	Are peatlands cool humid islands in a landscape?. Hydrological Processes, 2020, 34, 5013-5025.	1.1	4
117	Spatial distribution of chemical weathering intensity on an acid hillslope. Zeitschrift FÃ¼r Geomorphologie, 2000, 44, 379-402.	0.3	4
118	Slopes: solute processes and landforms. Geological Society Memoir, 0, , M58-2021-5.	0.9	4
119	Durham University Observatory and its meteorological record. Weather, 2007, 62, 265-269.	0.6	3
120	The seven sources of variance in fluvial flux time series. Hydrological Processes, 2018, 32, 3996-3997.	1.1	3
121	The dissolved organic carbon flux from the UK â€" A new Bayesian approach to flux calculation. Journal of Hydrology, 2020, 590, 125511.	2.3	3
122	Floodplains in River Ecosystems. Water Quality Measurements Series, 2006, , 1-15.	0.1	2
123	The Role of Floodplains in Mitigating Diffuse Nitrate Pollution. , 0, , 253-268.		2
124	A 50â€year record of nitrate concentrations in the Slapton Ley Catchment, Devon, United Kingdom. Hydrological Processes, 2021, 35, .	1.1	2
125	Spatial variations in rainfall and stream water quality around the Avonmouth industrial Complex. International Journal of Environmental Studies, 1977, 11, 205-209.	0.7	1
126	Factors influencing the growth of miniature ice lenses. Earth Surface Processes and Landforms, 1981, 6, 179-182.	1.2	1

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127	Modelling the spatial variability in floodplain soil contamination during flood events to improve chemical mass balance estimates. , 1998, 12, 1233.		1
128	Whither field hydrology? The need for discovery science and outrageous hydrological hypotheses. , 2015, 51, 5919.		1
129	BOD as a Measure of Fluvial Organic Matter Labilityâ€”The Decoupling of O₂ Consumption From CO₂ Production. Journal of Geophysical Research G: Biogeosciences, 2021, 126, .	1.3	1
130	The Place of Field Studies in Environmental Science. , 2020, , 47-65.		0
131	The History of Fieldwork in the Geosciences. , 2020, , 66-86.		0