Penny J Johnes

List of Publications by Citations

90 papers	4,614 citations	34 h-index	67 g-index
99 ext. papers	5,254 ext. citations	6.8 avg, IF	5.59 L-index

#	Paper	IF	Citations
90	Agriculture. Nutrient imbalances in agricultural development. *Science*, **2009**, 324, 1519-20	33.3	887
89	Evaluation and management of the impact of land use change on the nitrogen and phosphorus load delivered to surface waters: the export coefficient modelling approach. *Journal of Hydrology*, **1996**, 183, 323-349	6	495
88	Uncertainties in annual riverine phosphorus load estimation: Impact of load estimation methodology, sampling frequency, baseflow index and catchment population density. *Journal of Hydrology*, **2007**, 332, 241-258	6	235
87	Nitrogen fluxes from the landscape are controlled by net anthropogenic nitrogen inputs and by climate. *Frontiers in Ecology and the Environment*, **2012**, 10, 37-43	5.5	233
86	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	10.2	160
85	MODELLING THE IMPACT OF LAND USE CHANGE ON WATER QUALITY IN AGRICULTURAL CATCHMENTS. *Hydrological Processes*, **1997**, 11, 269-286	3.3	157
84	The determination of total nitrogen and total phosphorus concentrations in freshwaters from land use, stock headage and population data: testing of a model for use in conservation and water quality management. *Freshwater Biology*, **1996**, 36, 451-473	3.1	133
83	A comparison of models for estimating the riverine export of nitrogen from large watersheds. *Biogeochemistry*, **2002**, 57, 295-339	3.8	125
82	CONTRIBUTION OF NITROGEN SPECIES AND PHOSPHORUS FRACTIONS TO STREAM WATER QUALITY IN AGRICULTURAL CATCHMENTS. *Hydrological Processes*, **1996**, 10, 971-983	3.3	122
81	Trends in nutrients. *Hydrological Processes*, **1996**, 10, 263-293	3.3	113
80	A procedure for the simultaneous determination of total nitrogen and total phosphorus in freshwater samples using persulphate microwave digestion. *Water Research*, **1992**, 26, 1281-1287	12.5	103
79	The Phosphorus Indicators Tool: a simple model of diffuse P loss from agricultural land to water. *Soil Use and Management*, **2003**, 19, 1-11	3.1	90
78	Organic phosphorus in the terrestrial environment: a perspective on the state of the art and future priorities. *Plant and Soil*, **2018**, 427, 191-208	4.2	87
77	High-frequency monitoring of nitrogen and phosphorus response in three rural catchments to the end of the 2011–2012 drought in England. *Hydrology and Earth System Sciences*, **2014**, 18, 3429-3448	5.5	82
76	Physico-chemical controls on phosphorus cycling in two lowland streams. Part 2--the sediment phase. *Science of the Total Environment*, **2004**, 329, 165-82	10.2	80
75	Technical Note: Testing an improved index for analysing storm discharge–concentration hysteresis. *Hydrology and Earth System Sciences*, **2016**, 20, 625-632	5.5	73
74	Major agricultural changes required to mitigate phosphorus losses under climate change. *Nature Communications*, **2017**, 8, 161	17.4	72

73	Nitrogen as a threat to European water quality379-404		57
72	Impacts of runoff from sulfuric soils on sediment chemistry in an estuarine lake. *Science of the Total Environment*, **2004**, 329, 115-30	10.2	55
71	Integrating nitrogen fluxes at the European scale345-376		54
70	Physico-chemical controls on phosphorus cycling in two lowland streams. Part 1 -- the water column. *Science of the Total Environment*, **2004**, 329, 145-63	10.2	54
69	Land use scenarios for England and Wales: evaluation of management options to support good ecological status in surface freshwaters. *Soil Use and Management*, **2007**, 23, 176-194	3.1	53
68	Steady state and dynamic modelling of nitrogen in the River Kennet: impacts of land use change since the 1930s. *Science of the Total Environment*, **2002**, 282-283, 417-34	10.2	53
67	Nitrogen flows from European regional watersheds to coastal marine waters271-297		45
66	THE MONITORING OF ECOLOGICAL QUALITY AND THE CLASSIFICATION OF STANDING WATERS IN TEMPERATE REGIONS: A REVIEW AND PROPOSAL BASED ON A WORKED SCHEME FOR BRITISH WATERS. *Biological Reviews*, **1996**, 71, 301-339	13.5	45
65	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	10.2	44
64	Regulation of surface water quality in a Cretaceous Chalk catchment, UK: an assessment of the relative importance of instream and wetland processes. *Science of the Total Environment*, **2002**, 282-283, 159-74	10.2	43
63	Phosphorus loss from agricultural catchments: pathways and implications for management. *Soil Use and Management*, **1998**, 14, 175-185	3.1	41
62	Soil functions and ecosystem services research in the Chinese karst Critical Zone. *Chemical Geology*, **2019**, 527, 119107	4.2	40
61	Bryozoan populations reflect nutrient enrichment and productivity gradients in rivers. *Freshwater Biology*, **2009**, 54, 2320-2334	3.1	40
60	Landscape, regional and global estimates of nitrogen flux from land to sea: Errors and uncertainties. *Biogeochemistry*, **2002**, 57, 429-476	3.8	40
59	A comparison of diatom phosphorus transfer functions and export coefficient models as tools for reconstructing lake nutrient histories. *Freshwater Biology*, **2005**, 50, 1651-1670	3.1	39
58	Methods for detecting change in hydrochemical time series in response to targeted pollutant mitigation in river catchments. *Journal of Hydrology*, **2014**, 514, 297-312	6	38
57	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	37
56	Discharge and nutrient uncertainty: implications for nutrient flux estimation in small streams. *Hydrological Processes*, **2016**, 30, 135-152	3.3	34

55	Nitrogen processes in aquatic ecosystems126-146		32
54	Variation in dissolved organic matter (DOM) stoichiometry in U.K. freshwaters: Assessing the influence of land cover and soil C:N ratio on DOM composition. *Limnology and Oceanography*, **2019**, 64, 2328-2340	4.8	29
53	Benchmarking the predictive capability of hydrological models for river flow and flood peak predictions across over 1000 catchments in Great Britain. *Hydrology and Earth System Sciences*, **2019**, 23, 4011-4032	5.5	28
52	Catchment Phosphorous Losses: An Export Coefficient Modelling Approach with Scenario Analysis for Water Management. *Water Resources Management*, **2012**, 26, 1041-1064	3.7	26
51	Nitrogen speciation and phosphorus fractionation dynamics in a lowland Chalk catchment. *Science of the Total Environment*, **2013**, 444, 466-79	10.2	25
50	Assessing the drivers of dissolved organic matter export from two contrasting lowland catchments, U.K. *Science of the Total Environment*, **2016**, 569-570, 1330-1340	10.2	24
49	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	10.2	24
48	Identifying the main drivers of change of phytoplankton community structure and gross primary productivity in a river-lake system. *Journal of Hydrology*, **2020**, 583, 124633	6	23
47	A geospatial framework to support integrated biogeochemical modelling in the United Kingdom. *Environmental Modelling and Software*, **2015**, 68, 219-232	5.2	21
46	Understanding lake and catchment history as a tool for integrated lake management. *Hydrobiologia* , **1999**, 395/396, 41-60	2.4	20
45	Hydrological controls on DOC : nitrate resource stoichiometry in a lowland, agricultural catchment, southern UK. *Hydrology and Earth System Sciences*, **2017**, 21, 4785-4802	5.5	19
44	Microbial use of low molecular weight DOM in filtered and unfiltered freshwater: Role of ultra-small microorganisms and implications for water quality monitoring. *Science of the Total Environment*, **2017**, 598, 377-384	10.2	18
43	Microbial uptake kinetics of dissolved organic carbon (DOC) compound groups from river water and sediments. *Scientific Reports*, **2019**, 9, 11229	4.9	18
42	Dissolved organic nutrient uptake by riverine phytoplankton varies along a gradient of nutrient enrichment. *Science of the Total Environment*, **2020**, 722, 137837	10.2	17
41	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	6.2	17
40	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	15
39	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, 157-66	10.2	14
38	Ecosystem service delivery in Karst landscapes: anthropogenic perturbation and recovery. *Acta Geochimica*, **2017**, 36, 416-420	2.2	14

37	Nutrient enrichment induces a shift in dissolved organic carbon (DOC) metabolism in oligotrophic freshwater sediments. *Science of the Total Environment*, **2019**, 690, 1131-1139	10.2	13
36	Nutrient monitoring, simulation and management within a major lowland UK river system: the Kennet. *Mathematics and Computers in Simulation*, **2004**, 64, 307-317	3.3	12
35	The prediction of nutrients into estuaries and their subsequent behaviour: application to the Tamar and comparison with the Tweed, U.K.. *Hydrobiologia*, **2002**, 475/476, 239-250	2.4	12
34	August Thienemann and Loch Lomond an approach to the design of a system for monitoring the state of north-temperate standing waters. *Hydrobiologia*, **1994**, 290, 1-12	2.4	10
33	Characterisation of treated effluent from four commonly employed wastewater treatment facilities: A UK case study. *Journal of Environmental Management*, **2019**, 232, 919-927	7.9	10
32	Short-term biotic removal of dissolved organic nitrogen (DON) compounds from soil solution and subsequent mineralisation in contrasting grassland soils. *Soil Biology and Biochemistry*, **2016**, 96, 82-85	7.5	9
31	Using 13C to reveal the importance of different water transport pathways in two nested karst basins, Southwest China. *Journal of Hydrology*, **2019**, 571, 425-436	6	8
30	Determining the Impact of Riparian Wetlands on Nutrient Cycling, Storage and Export in Permeable Agricultural Catchments. *Water (Switzerland)*, **2020**, 12, 167	3	7
29	Response--Nutrient Imbalances. *Science*, **2009**, 326, 665-666	33.3	7
28	Developing integrated approaches to nitrogen management541-550		6
27	Cascading multiscale watershed effects on differential carbon isotopic characteristics and associated hydrological processes. *Journal of Hydrology*, **2020**, 588, 125139	6	6
26	High resolution HPLC-MS confirms overestimation of urea in soil by the diacetyl monoxime (DAM) colorimetric method. *Soil Biology and Biochemistry*, **2019**, 135, 127-133	7.5	5
25	Rates of hydroxyapatite formation and dissolution in a sandstone aquifer: Implications for understanding dynamic phosphate behaviour within an agricultural catchment. *Applied Geochemistry*, **2020**, 115, 104534	3.5	5
24	Meeting ecological restoration targets in European waters: a challenge for animal agriculture. **2007** , 185-203		5
23	The Phosphorus Indicators Tool: a simple model of diffuse P loss from agricultural land to water. *Soil Use and Management*, **2003**, 19, 1-11	3.1	5
22	Untargeted characterisation of dissolved organic matter contributions to rivers from anthropogenic point sources using direct-infusion and high-performance liquid chromatography/Orbitrap mass spectrometry. *Rapid Communications in Mass Spectrometry*, **2020**, 34 Suppl 4, e8618	2.2	5
21	Impact of microbial activity on the leaching of soluble N forms in soil. *Biology and Fertility of Soils*, **2018**, 54, 21-25	6.1	4
20	A comparison of models for estimating the riverine export of nitrogen from large watersheds **2002**, 295-339		4

19	Gradients of Anthropogenic Nutrient Enrichment Alter N Composition and DOM Stoichiometry in Freshwater Ecosystems. *Global Biogeochemical Cycles*, **2021**, 35, e2021GB006953	5.9	4
18	Trends in nutrients **1996**, 10, 263		4
17	Ground penetrating radar as a tool to improve heritage management of wetlands **2014**,		3
16	Land cover and nutrient enrichment regulates low-molecular weight dissolved organic matter turnover in freshwater ecosystems. *Limnology and Oceanography*, **2021**, 66, 2979-2987	4.8	3
15	Rapid depletion of dissolved organic sulphur (DOS) in freshwaters. *Biogeochemistry*, **2020**, 149, 105-113	3.8	2
14	Hydrological controls on DOC : nitrate resource stoichiometry in a lowland, agricultural catchment, southern UK		2
13	Technical Note: Testing an improved index for analysing storm nutrient hysteresis		2
12	High-resolution monitoring of catchment nutrient response to the end of the 2011–2012 drought in England, captured by the demonstration test catchments		2
11	CONTRIBUTION OF NITROGEN SPECIES AND PHOSPHORUS FRACTIONS TO STREAM WATER QUALITY IN AGRICULTURAL CATCHMENTS		2
10	Characterisation of riverine dissolved organic matter using a complementary suite of chromatographic and mass spectrometric methods. *Biogeochemistry*,1	3.8	2
9	Shifting stoichiometry: Long-term trends in stream-dissolved organic matter reveal altered C:N ratios due to history of atmospheric acid deposition. *Global Change Biology*, **2022**, 28, 98-114	11.4	1
8	Understanding lake and catchment history as a tool for integrated lake management **1999**, 41-60		1
7	Landscape, regional and global estimates of nitrogen flux from land to sea: Errors and uncertainties **2002**, 429-476		1
6	Sampling, storage and laboratory approaches for dissolved organic matter characterisation in freshwaters: Moving from nutrient fraction to molecular-scale characterisation.. *Science of the Total Environment*, **2022**, 154105	10.2	1
5	Identification and quantification of myo-inositol hexakisphosphate in complex environmental matrices using ion chromatography and high-resolution mass spectrometry in comparison to P NMR spectroscopy. *Talanta*, **2020**, 210, 120188	6.2	0
4	Tracing carbon and nitrogen microbial assimilation in suspended particles in freshwaters. *Biogeochemistry*,1	3.8	0
3	What do changing weather and climate shocks and stresses mean for the UK food system?. *Environmental Research Letters*, **2022**, 17, 051001	6.2	0
2	Quantifying the non-point source contribution to nutrient loading on freshwaters in 32 UK catchments. *Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology*, **2000**, 27, 1306-1309		

List of Publications

1 August Thienemann and Loch Lomond an approach to the design of a system for monitoring the state of north-temperate standing waters **1994**, 1-12